



生命和平大學

University for Life and Peace

# Winter School 2020

**Healing the Earth:  
Transformative Action for  
Ecology and Technology**

療癒地球 - 生態與科技的轉換行動

Yangon, Myanmar  
January 8 - 18, 2020





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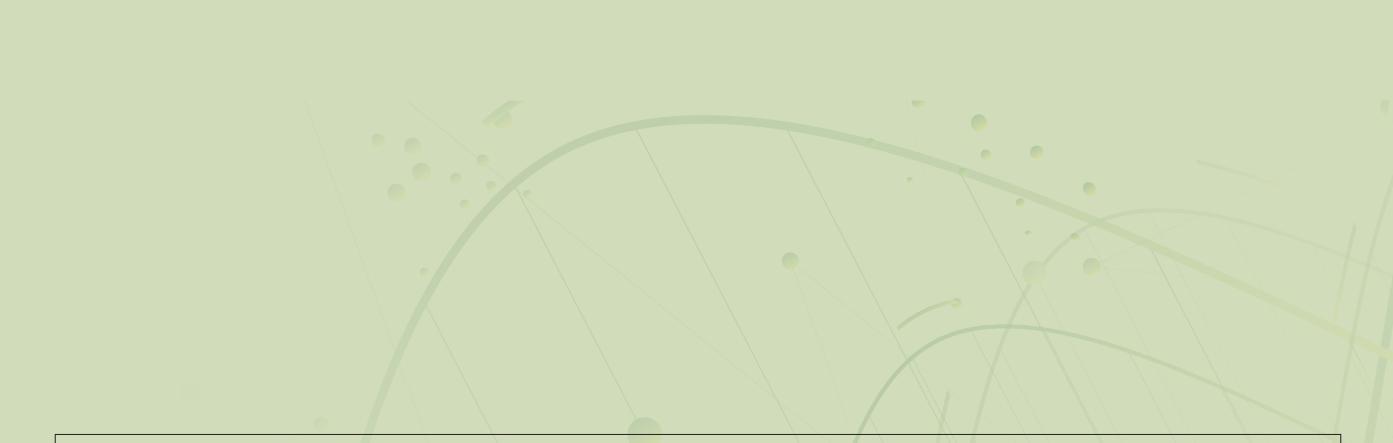
# The Winter School 2020

## Yangon, Myanmar

January 8–18, 2020

## Healing the Earth: Transformative Action for Ecology and Technology

In preparation for establishing **The University for Life and Peace** in Myanmar, Ling Jiou Mountain Buddhist Society, Taiwan, and the Human Science Centre of Ludwig Maximilians University Munich, Germany, in cooperation with academic institutions worldwide are announcing the following program.



Students will receive the Academic Certificates  
after the review of Academic Committee from

The Human Science Centre Of Ludwig Maximilians University Munich, Germany  
The University for Life and Peace Preparatory Office, Taiwan



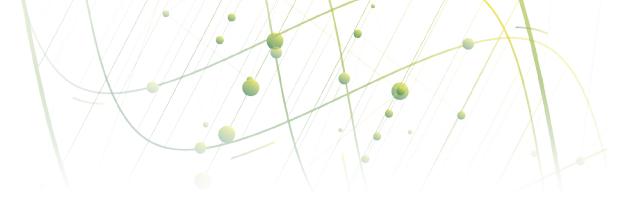
## A Short Biography of **Dharma Master Hsin Tao**

Dharma Master Hsin Tao is the founder of the Ling Jiou Mountain Buddhist Society, the Museum of World Religions, and the INGO, Global Family for Love and Peace. In Myanmar, he established the LJM Maha Kusala Yama Monastery in Yangon and the Sramanera School in Naung Mon. The Sramanera School takes in and provides education to orphans and underprivileged children.

Born in Myanmar in 1948, Master Hsin Tao was left orphaned and impoverished at the age of four. Witnessing the destruction of homeland and life during wartime implanted in him a longing for peace. He was brought by the army to Taiwan when he was 13.

Master Hsin Tao was ordained at the age of 25. Making a vow to attain enlightenment, he practiced austerities in deserted temples and graveyards for over ten years. During the time he attained deep insight into the meaning of equality and oneness of all beings, and realized that peace of the mind is the only way to the real peace. In 1984, he established the Ling Jiou Mountain Wusheng Monastery to propagate the dharma with an emphasis on “Compassion and Chan” as its lineage style; he also sought to advance peace with the notion of “Loving Earth, Loving Peace.”

Master Hsin Tao has long been concerned about the issue of war and peace. He believes that it is religion’s responsibility and capacity to promote peace. To make possible the real peace, interreligious dialogues should be carried out to the full extent, with a view to shed light on the common ground of love and compassion and the necessity of harmonious coexistence. Subsequently, in 1991, Master Hsin Tao started preparations for constructing the Museum of World Religions as a platform for interfaith exchange and peace-building, together with his effort to spread the message of “respect for all faiths, care for all cultures, and love for all life” all over the world. It took him 10 years to gain support and raise funds from numerous believers for the



Museum's opening ceremony to take place on Nov. 9, 2001, attended by many religious leaders and others from around the world.

Master Hsin Tao believes that constant dialogue, listening, and cooperation foster mutual understanding, learning, and trust among different religions. For many years he has been committed to advancing interreligious dialogue internationally, as seen in his attendance to four consecutive meetings held by the Council for a Parliament of the World's Religions (CPWR) since 1999, and the Millennium World Peace Summit of Religious and Spiritual Leaders hosted by the UN in 2000. Since 2002, Master Hsin Tao has initiated an ongoing series of the Buddhist-Muslim Dialogue, in the hope to build up religious peace through the Buddhist gentle power. Until 2017, 15 Buddhist-Muslim Dialogues have been organized in different places around the world, including New York, Indonesia, Malaysia, Paris, Iran, Spain, Beijing, Taipei, the UN headquarter, Australia, India and Salt Lake City.

Through these many years, Master Hsin Tao's dedication to promoting the Dharma, Chan meditation, and interreligious peaceful dialogue, as well as his contribution to a harmonious world and the Earth's safety has brought him international recognition and encouragement. The awards he received include: "Pt. Motilal Nehru National Award for Peace, Tolerance and Harmony"(2005) from the Interfaith Harmony Foundation, India; "Outstanding Contribution to the Propagation of Buddhism Award"(2006), "Excellence in Teaching Meditation Award"(2010), and "The Highest Meditation Achievement Award"(2014) from the Myanmar Government; "Interfaith Visionary Award"(2010) from the Temple of Understanding, U.S.; "Benefactor of Buddhism Award"(2013) from the Royal Patriarch Temple, Thailand; the 2nd "World Buddhist Outstanding Leader Award" (2015) from Thai National Office of Buddhism in cooperation with the World Fellowship of Buddhist Youth.





## Foreword





## Dharma Master Hsin Tao

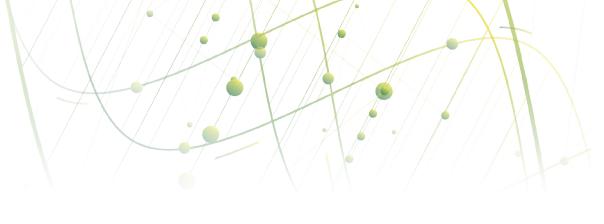
Good day, respected professors, students, friends! Peace and blessings to you all!

The second year of the Ling Jiou Mountain Winter school, planned and prepared by the preparatory office of University for Life and Peace, is going to start soon in Yangon, Myanmar. On this occasion, I am very grateful to all supporters around the world who offered their contribution and support of this program. On behalf of all members in the preparatory team who have given their earnest efforts in making this possible, I would like to express my deep appreciation and gratitude to each and everyone of you.

The first winter school was conducted in January of this year 2019, with the theme of “Addressing Deep Roots of the Ecological crisis--- Towards New Strategies.” Ten world renowned professors were invited to offer their guidance and wisdom, offering lectures and leading discussion groups among students. Twenty-five students from various academic fields attended, and completed the course.

This first class had attracted much attention and received favorable responses in both Myanmar and in international academic sectors, in part due to its cross-disciplinary approach to research, which also included practical action plans. Professors and students continued their discussions and study for nearly six months after the class, resulting in a total of 15 approved and credited individual and group papers, granted with Achievement Certificates. With such a historical accomplishment, we have now indeed taken the first step toward the establishment of our university program.

We have now gained more confidence in moving forward, since a solid foundation has been built from this initial experience. After rethinking and re-examining today’s situation around the world, we carefully selected the theme for this year as “Healing the Earth—Transformative Action for Ecology and Technology”. For the teaching faculty, we were able to again invite excellent professors from top universities. The criteria of selecting students included excellent professional knowledge, a sense of responsibility, and ambition.



This time, we are very pleased and honored to receive strong support from Yangon University, and the State Pariyatti Sasana University, and they will also send outstanding professors and students to attend our winter school. Thus, our efforts will have their impact on the local scene as well as in the international arena.

It is our firm belief that integrating both spirituality and technology into our work of healing the ecological system is a new and better educational model that will be beneficial to the Earth.

The ever-changing world situation is so unpredictable, human awareness keeps advancing along with the time. As such, shedding light on the root of our problems is the key to our search for solutions. Through the experience gained from the first year of the winter school, we are able to identify a clear and obvious strategic goal of our vision of education for peace. Therefore, the theme of this year “Healing the Earth—Transformative Action for Ecology and Technology,” emphasizes the responsibility of technological applications to the eco-system by actively taking on beneficial practices and minimizing destructive ones.

We expect that through careful curriculum planning and a closely-knit interactive type of education that we are putting in place for this Winter School, new wisdom will be generated through mutual exchanges and resonance among participants. We expect that this wisdom will address all aspects of human living and lead to rethinking and correction of current practices, resulting in action items that will entail a transformation in the way we think, speak, and do things vis-à-vis our Earth.

In September of 2019, the United Nations Climate Summit was held in New York, and there, Michelle Bachelet, Former President of Chile sent out a warning that “climate crisis is the biggest threat to human beings in history, and no country, institute or decision maker shall sit on the sidelines and do nothing”. She proposes five principles to promote climate action, and issues severe warnings to highlight the fact that the global climate crisis has come to the level of threatening our entire humanity and is now creating a human rights crisis. I deeply be-



lieve that the expertise from all of you can present further evidence or collective experience that will confirm what she has said.

This winter school research class is not intended just for a certain group of people to get together and have talks among themselves that result in nothing. We the participants must be confident in knowing that we are the seeds of peace, and that we are the among the pioneers of loving Earth. We must not only show courage in confronting our serious global problems together, but also lead the way to action that can forge through difficult situations.

Winter school is a part of a high-level research education, and although its scale is relatively small, it can be considered as a locomotive of the academic sector, and that it will have a major contribution to make to our common future.

Meanwhile, reporting on another aspect of our Ling Jiou Mountain Buddhist Society's work here in Myanmar, with the blessing of Buddha, the basic nurturing program provided by the Novice Buddhist Monastic School in Naungmon region has already accepted more than 400 novice Buddhist monks as of December of 2019. They are undertaking the traditional and strict Buddhist monastic education that will build a cornerstone for modern education. Furthermore, an organic eco-agricultural experiment program is being implemented in that region in order to create an advanced toxic-free organic farming and soil improvement technology. The program has entered into an initial operation mode and has started to demonstrate some results. These are important facets of our task linked to the central program of the University for Life and Peace that is being prepared for by the Winter School.

The roadmap of the education program created by us in Myanmar has been comprehensively designed in a way that includes a graduate school in Yangon, a large piece of land in Bago area to be used as the site of the university in the future, a series of education programs provided in Naungmon which covers elementary school to junior college, including secular and religious sectors. The comprehensively integrated education program aims at a providing a vision of



co-existence and co-prosperity on Earth, toward which we all aspire. It will not only provide excellent resources for Myanmar, an ancient country that has been blessed with the heritage of Buddha for over a thousand years, on how to face the impact of modernization, but also offer clear guidance to the mainstream of society and to the technological sector, currently driven by materialistic values in pursuing a pattern of global development that has caused the ecological crisis. If seeds of peace and awakening can grow from this program in a way that can direct technology in applying itself to ecological healing, this will certainly be good news for creating a sustainable way of life for the Earth. With the spiritual cultivation of compassion grounded on Confucian, Daoist, and Buddhist vision and practice, these seeds of peace and awakening can provide us with hope of advancing human civilization.

I am confident that our professional team of professors and consultants, selected from prestigious institutions all over the world, have in them such a mind of awakening, with many supporters around them who are more capable than I to see where the opportunities are. A commitment to action is better than many beautiful words. Allow me to one more time sincerely invite everyone to join and share this movement of healing and loving Earth, and loving peace, regardless of place, time and form. Together we can plant the seeds of wisdom and compassion through human education that will thoroughly turn around the directions that will determine the fate of the Earth.

Dharma Master Hsin Tao  
Founder, Ling Jiou Mountain Buddhist Society



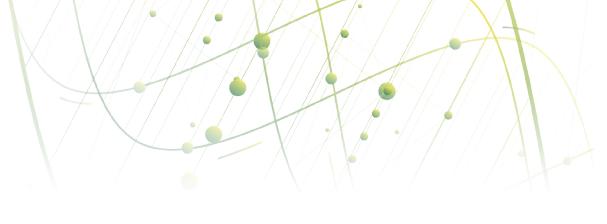
## Prof. Dr. Michael von Brück

More than 12,000 scientists from all over the world have issued a severe warning with regard to the global warming and climate change, published in the Journal of Bioscience. They identify six critical areas where change has to occur immediately in order to avoid the worst effects of the coming catastrophe: energy, toxic substances, protection of nature, food production and consumption, economy and population growth. More and more scientists become activists as is documented in an appeal by more than 26,000 scientists who call their initiative „Scientists for Future“ from Germany, Austria and Switzerland. The title of this appeal is significant: „The concern of the demonstrating youth is justified“, published in March 2019. They decisively declare to support the activists engaged in the movement Fridays for Future started by the young generation. They argue that all the activities suggested by present day governments are by far not sufficient to change the tide. Just to take one example: In spite of all promises and efforts taken at the Paris Climate Conference to reduce or even stop fossil energy production the CO<sub>2</sub> emission is still growing on a worldwide scale.

All six areas mentioned are interconnected. And this in itself is a clear indicator that we have to overcome compartmentalized analysis and problem solving strategies. Rather, we have to implement a systemic approach. This has been done in many of our universities, ecological programs are mushrooming, and big companies, too, have taken up the challenge. This is a great sign of hope, but it is not enough.

No need to repeat the data indicating the severe damage done to the earth by our industrial ways of production and consumption, by our way of life. Extensive research in ecology has been done. Enough is known and established as certain knowledge. Therefore, the thousands of scientists mentioned call for more efforts and studies of applied knowledge and practicable solutions. However, it seems that the busy collection of data about the damage is also a strategy of avoidance, being a way to avoid facing the necessary changes in our life.

Our societies undergo a fundamental transformation. One reason is the new industrial revolution – automatization artificial intelligence, big data, new com-



munication networks, bioengineering etc. are just a few areas. The other reason is the ecological crisis. Ecological balance is threatened to be destroyed, and so many factors are involved that it is impossible to oversee the developments that are going to happen once the global temperature has increased by 2 or 3 degrees or even more. Huge inhabited regions of the earth may be flooded, huge migration waves would be the consequence. The result of this would be wars all over and unprecedented suffering. This is just one aspect. The other one is the loss of biodiversity. Here we would need a change in agricultural methods, not just the ban of pesticides but a very different system of the usage of land etc. We need to stop the pollution of the oceans, because it is not only the atmosphere that is destroyed or the land that is turned into waste land but also the water that is turned into acid fluid.

One of the problems which we often are not aware of is that knowledge in the basics of biology is lost. Most of young people who will be economic and political elite and decision makers in the future grow up in urban environments without the knowledge of the different species, starting from plants and insects upto birds and mammals. Schools have a different agenda and are busy with teaching most complicated aspects of molecular biology without giving attention to the obvious. Thus, if a species is dying out nobody notices, because we did not learn to see and appreciate the richness of life, until it is too late and whole biosystems collapse. In spite of all the studies and lip services by governments, in a more and more globalized economy lack of ecological knowledge is one of the main reasons for massive miscalculation and disastrous developments. The agricultural system of production, trade and consumption causes investments in even bigger production lines which standardize products, require artificial fertilizers and thus cause poverty in poorer regions of the world and the destruction of biodiversity which is essential for survival in the future.

We could go on, but it is not necessary, for we know. There is a most urgent need for action. Some people act, but most people and governments just talk, and do not act. Why?



The reason may have to do with the fact that so far in history humankind has had the experience that one could migrate to a different place if the places which had been inhabited before would have become inhospitable. This is the destiny of nomads, of course, and agriculture could be started again if a certain place had been flooded, dried up or whatever.

This option has gone. The whole earth is inhabited, and there are no unknown or empty spaces any more. We become aware of the finitude of the resources necessary for life. Space is limited, time too. We do not have the time to wait for a coming paradise or return of the Golden Age, be it a religious expectation or an ideological goal. In development of technologies humankind has made great achievements, so that the results of our very development fall back on us and threatens to destroy us because we have failed to develop our consciousness: our emotions and the regulation of unconscious forces. Our evolution has been one-sided. In these mental areas we still live in the jungle of ignorance, chaotic feelings and unadopted patterns of behaviour.

Therefore, it is now our urgent responsibility to take the evolution of our consciousness into our hands and to achieve something more adapted than we have now. This is a Herculean task in spiritual development. But in principle we know what the direction should be. We do have the tools, but we do not yet know how to use them. The transformation is necessary, and it is possible.

In this respect it seems to me that two preconditions are to be taken into consideration: We need both, courage and restraint. To develop these attitudes is a central concern of spiritual development. Courage takes a risk. It is often also going against the mainstream and to leave behind old patterns of thinking. Courage is a break up, it moves towards new opportunities. Restraint may be a wise self-limitation. Restraint is insight into a necessity. It may result in tremendous gains for the quality of life. It is a move from quantity to quality because it allows us to concentrate and enjoy the single event, the small, the intensity of the moment – in all areas of life, to enjoy a sense experience with fullest attention, to be cautious with our speech and to achieve precision in our actions.



Transformation is necessary. And it is possible. It will affect all areas of life: Technologies, economy, politics – and more than anything else our mental set up for the ways of thinking, feeling and acting. To say it in one word: it is to be an integrated view on the world, and integrated life-style, based on the insight of reciprocity or a systemic perception of things. Only if we develop both better technologies and better consciousness we will succeed.

Better technologies means that we understand the interdependence of all that is and construct systems of machinery adopted to this fact, better consciousness means a mind that integrates reason and emotion, that has learned to realize wholeness, that is content because it has reached a level of mindfulness so as to prefer quality before quantity.

To train the mind is possible. Let us engage in it. To develop sciences and technology in such a way, that we do not destroy nature but enhance it, is possible. Let us engage in it. What is crucial here is an education that takes care of both sides. This is exactly what the University for Life and Peace wants to achieve, what this Winter School is all about. Let us go to work, with courage, self-restraint, joy and diligence.



## Program Outlines



# **OUTLINES**

## **A) Mental and Emotional Level**

## **B) Communication Processes**

## **C) Social and Economic Level**

### **1. Motivation**

Ecological transformation is not possible only by technological advancement but requires also changes in the way of governance in the fields of science, technology, administration, education etc. It requires a transformation of human behaviour by deeper knowledge in all action fields of individual and institutions. However, different studies have shown that mere knowledge does not provide sufficient motivation for changing human's behaviour. Rather, 4 factors have been identified, which would play a crucial role in this respect. Accordingly, any ecological engagement

- (1) Must create joy and satisfaction,
- (2) Must make sense,
- (3) Must strengthen self-confidence and a sense of meaning for the persons concerned,
- (4) Must obtain a higher goal that transcends the horizon of the individual.

### **2. Purpose**

The Winter School 2020 starts with the mental and emotional motivation on the one hand and the social and economic incentives on the other hand, mediated by the media which have such an enormous influence on the strategies of action by individuals, companies and governments. Investments, capital flow and other far-reaching decisions direct the economic incentives and production as well as consumption processes. Government regulations



and tax systems set frames for rational choices. Transforming these systems locally and on a worldwide scale might work only if this transformation fulfils the 4 factors mentioned. So, in projects designed to create a creative learning experience to students and faculty together, students would have to ask which changes could be implemented locally and globally so that these 4 factors might be addressed properly.

### **3. Local Cooperating Partners**

University of Yangon

State Pariyatti Sasana University, Yangon

Lampi Marine National Park, Myanmar (Istituto Oikos, Milano)

### **4. Persons involved**

#### **Faculties:**

Prof. Dr. Michael von Brück, Human Science Center, Ludwig Maximilians University

Dr. Tadeu Caldas, Global Expert on Sustainable Development, Ecotropic Consulting GmbH

Prof. Dr. Peter Edwards, Chairs of Sustainability Research Initiative of Swiss Academy of Natural Sciences

Ms. Elisa Facchini, Project Manager, Lampi Marine National Park, Myanmar

Prof. Dr. Nay Htun, Founder of Green Economy Green Growth, Former U.N. Assistant-Secretary-General, (UNDP, UNEP), USA

Prof. Kenneth Pugh, President and Director of Research at Haskins Laboratories, Yale University and University of Connecticut

Prof. Dr. Eva Ruhnau, Scientific Director, Human Science Center, Ludwig Maximilians University

Ms. Tammy Turner, Permaculture Institute, Taiwan

Prof. Dr. Ovid Tzeng, Chancellor, Taiwan University System



Prof. Dr. Anastasia Zabaniotou, Department of Chemical Engineering, Aristotle University of Thessalonik

**Advisors:**

Dr. des. Alexander Benz, Human Science Center, Ludwig Maximilians University

Prof. Dr. Ruben Habito, Southern Methodist University Dallas, Texas

Prof. Dr. Myint Thu Myaing, Dept. of Law, University of Yangon, Myanmar

Dr. Maria Reis-Habito, Program Director Museum of World Religions, Taiwan

Prof. Dr. Khin Khin Soe, Dept. of Geography, University of Yangon, Myanmar

Dr. Larry Wong, Senior Advisor in various institutions Myanmar

## 5. Structure

The Winter School 2020 will be built upon the experiences and feedbacks of the Winter school 2019. It will develop the topics discussed into more detailed directions. There will be a focus on 3 dimensions of the Ecological Transformation:

- (1) Mental and Emotional Factors for Decision Making on local and global levels
- (2) New Communication Strategies
- (3) Incentives for Changing Behaviour – Social and Economic Reward Systems

All these dimensions will be dealt with by internationally leading specialists, their findings and suggestions shall be combined by interdisciplinary approaches in 4-5 Project research groups which will develop suggestions for concrete solutions for Ecological Transformation. Topics and Strategies for the Group Projects will be determined in cooperation with all the members of the Faculty, Advisors and Students during the first days of the Winter School.



### **Structure of Panels:**

- -Panels will be introduced by the respective speakers (5-10 min each),
- -followed by a controversial panel discussion (20 min) and
- -an open space discussion (plenary), inviting comments and suggestions from the students, leading to questions and proposals for themes of the Project Groups (40 min).

### **Papers:**

Students accepting our invitation agree to write an academic paper after the Winter School in due time. On that basis they will be given a certificate, issued by the Human Science Centre at the University of Munich, Germany.

## **6. Four/Five Project Groups**

The Project Groups shall identify topics which would link the content of the interdisciplinary Lecture/Discussion-Program to the local situation in Myanmar, Brazil (and elsewhere). Depending on the cooperation partners which Dr. Larry Wong and others would find in Yangon (see 3. above), the work of the groups will be planned in close contact with the local partners, so that opportunities and needs of the local situation on the one hand and the expertise of the international faculty members, advisors and students on the other hand would be combined.

Faculty and Advisors will work with the students on the Group Projects during the whole workshop period.

### **January 13 Constitutive Session for Project Groups:**

- (1) Special constitutive meeting for the Project Groups. After sufficient discussions in the Panels certain topics and areas will emerge as being crucial for transformative action, and students should identify them in the meeting.
- (2) Their suggestions will be written on a blackboard; the most interesting ones will be selected.
- (3) Students shall decide which group to join.
- (4) Faculty and Advisors will be asked to participate in the groups they are most interested in.



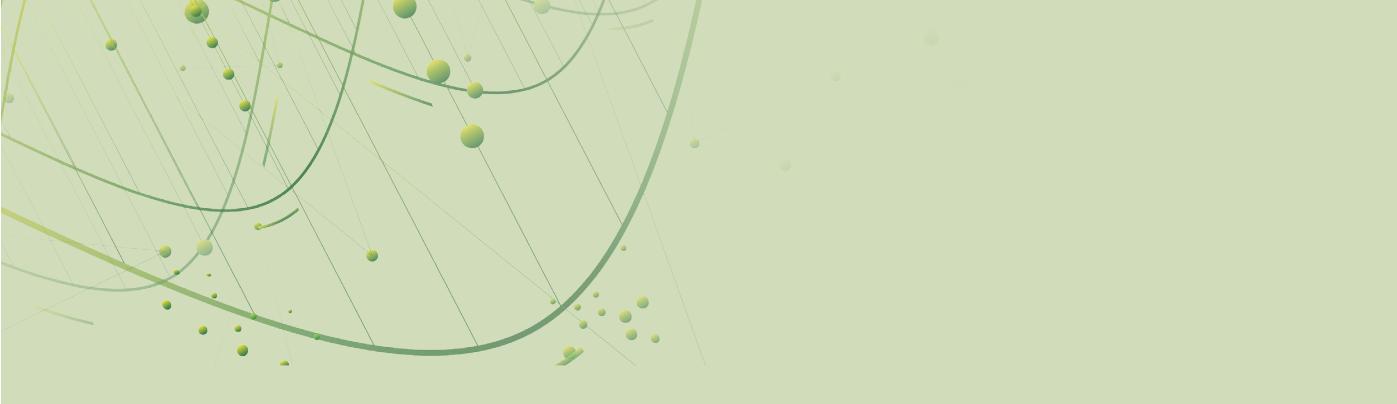
## 7. General Program

- Jan 7** Arrival of Faculty, Advisors and Students
- Jan 8** Morning: Opening Ceremony  
Afternoon: Ice Breaking Session, Outlines, Expectations, etc.  
KeyNote Speech by Prof. Dr. Nay Htun:  
The Root Causes and Triggers of Environment and Natural Resource Conflicts  
Discussion
- Jan 9 -10** Introductory Panels by Professors from different disciplines Groups working on Virtual Projects
- Jan 11** Lectures and Introduction into the Ecological Situation in Myanmar  
Morning:  
Special lecture Elisa Faccini: Lampi Marine National Park Project  
Afternoon:  
(1) Heng Ming Shih, LJMBS: Agricultural Farm and Education in Neung Mon Myanmar  
(2) Transformative Leadership for Ecological Action – Legal and Administrative Opportunities in Myanmar  
(3) Prof. Dr. Khin Khin Soe: Rural and Urban Development in Myanmar  
(4) Prof. Dr. Myint Thu Myaing: National and International Law Relating to Environmental Conservation
- Jan 12** Visit Ecological Projects near Yangon (Bamboo Project)
- Jan 13-15** Introductory Panels and Project Group Discussions
- Jan 16** Project Group Discussions and Yangon City Tour
- Jan 17** Presentations/ Final Discussions
- Jan 18** Closing Ceremony, Lunch, Departures



## **8. Further Strategies**

- Morning yoga (MvB) and Evening Meditation (Master Hsin Tao);
- Each session starts with 5 minutes Mindfulness Practice;
- Special Lunch on Jan 16;
- Special Ceremony at Shewdagon Pagoda on Jan 13 evening  
(led by Dharma Master Hsin Tao).



## CV and Abstracts of Teaching Faculty and Advisors



## **Prof. Dr. Michael von Brück**

Human Science Center, Ludwig Maximilians University, Munich, Germany

Dr. theol, is Prof. em. of Religious Studies at the University of Munich, Germany, and has been founder and Head of the Interfaculty Program of Religious Studies at the same University; He was also founding member of the Centre for Buddhist Studies in Munich (international PhD Program). He studied Theology, Indology and Comparative Linguistics at Rostock University, Indian Philosophy and Religion at Madras University. He specializes in Advaita Vedānta and Mahāyāna-Buddhism. Besides, he received a four years training in Yoga at the Krishnamacarya Yoga Mandiram in Madras and studied Zen-Buddhism in theory and practice at Tenryū-ji in Kyoto, Japan.

After a visiting professorship at Gurukul Lutheran College in Madras 1980-1985 he became Prof. of Comparative Religion at Regensburg University in 1988 and took over the chair of Religionswissenschaft at the University of Munich in 1991 and became director of this institute. He lectures widely all over the world and has been a visiting lecturer and professor at several German (Hamburg, Tübingen), American (Univ. of Hawaii, Univ. of California (Davis), Rice University, Harvard Center for the Study of World Religion etc.) and Asian Universities (Madras, Bangalore, Chiang Mai). For eight years he has served as the General Editor of the journal “Dialog der Religionen”. He is member of the Human Science Centre of Munich University and Co-Founder and member of the Centre for Buddhist Studies at the University of Munich. He has been a member of the Scientific Advisory Board of the Goethe Institute and a member of the Advisory Board of Suhrkamp Verlag: Edition World Religions.



He is the Founding Director of the Palliative-Spiritual Academy in Weyarn/Munich, Germany. Since 2015 he is Honorary Professor for Religious Studies/aesthetics of Religion at the Catholic Private University in Linz (Austria). He is the Head of Academic Development, University for Life and Peace Preparatory Office, Yangon and Taipei.

He has written more than twenty major books and about 300 essays in journals all over the world on theology, Buddhism, Hinduism and the encounter of World Religions (especially Buddhism and Hinduism). Some of his books are:

1. *The Unity of Reality. God, God-experience and Meditation in the Hindu-Christian Dialogue*, New York: Paulist Press 1991
2. *Weisheit der Leere. Sûtra-Texte des indischen Mahâyâna-Buddhismus*, Zürich: Benziger 1987
3. *Die Welt des tibetischen Buddhismus* München: Kösel 1996 (Italian translation: *Il Buddhismo Tibetano*, Vicenza: Neri 1998)
4. *Buddhismus und Christentum. Geschichte, Konfrontation, Dialog* (with Whalen Lai), München: C.H.Beck 1997 (English and French translations).
5. *Wie können wir leben? Religion und Spiritualität in einer Welt ohne Maß*, München: C.H.Beck 2002
6. *Zen. Geschichte und Praxis*, München: C.H.Beck 2004
7. *Bhagavad-Gîtâ*, Frankfurt: Verlag der Weltreligionen (Suhrkamp/Insel) 2007
8. *Einführung in den Buddhismus*, Frankfurt: Verlag der Weltreligionen (Suhrkamp/Insel) 2007
9. *Religion und Politik in Tibet*, Frankfurt: Verlag der Weltreligionen (Suhrkamp/Insel) 2008
10. *Leben in der Kraft der Rituale. Religion und Spiritualität in Indien* (with Regina von Brück), München: C.H.Beck 2011
11. *Grundzüge einer modernen Anthropologie* (with Günter Rager), Göttingen: Vandenhoeck & Ruprecht 2012
12. *Weltinnenraum. Rainer Maria Rilkes „Duineser Elegien“ in Resonanz mit dem Buddha*, Freiburg: Herder 2015
13. *Sehen-Verstehen-SEHEN. Meditationen zu Zen-Kalligraphien* (with Hans Zender), Freiburg: Karl Alber 2019
14. *Buddhismus. Die 101 wichtigsten Fragen*, München: C.H.Beck 2019

**Forthcoming:**

Interkulturelles Ökologisches Manifest, Freiburg: Alber (spring 2020)



## **PANEL ABSTRACT**

### **Motivation and Change - Courage and Insight: Social-Psychological Aspects and Communication Processes**

Facing the ecological crisis we need to develop both alert for the urgency and fear concerning possible disasters, but even more so a positive calculation for the opportunities provided in the perspective of changing our life-styles. It is the old question of the methods how to encounter the stranger: with fear and curiosity. The history of cultures provides strong examples how fundamental changes are possible and how and why such needed changes may have failed. We need to apply experiences from history and cognitive sciences, including psychology and the results of the numerous studies on the cognitive and emotional changes brought about by meditation practice, in order to develop appropriate programs to enhance our abilities to engage in new ways of thinking and action with regard to the desired behavioural change and the ecological crisis. Furthermore, a proper recognition of an education in meditative practice and the arts is required in order to develop creativity and new motivation for change. We will discuss some examples. The call for courage has to be interpreted on the background of the worldwide research and findings of risk management, that is to say the rationality of the distinction between risk and courage has to be discussed. Proper risk management is essential for the social and economic aspects of the ecological change. In order to intensify the motivation for courage new and more intense ways of communication in order to create new social binding experiences will be necessary, and we have to find opportunities to organize them. Here, a reform of the education system seems to be important. We need to ask which factors would provide opportunities in this respect and which factors would hinder motivation for change.



## Dr. Tadeu Caldas

Global Expert on Sustainable Development, Ecotropic Consulting GmbH, Germany

Tadeu Caldas has made his engineering and academic, post-graduation studies in Brazil and England. He has worked in the field of sustainable agriculture & land-use, corporate and public sustainability for the last 40 years. Over this period, he has been engaged as a consultant by governments, companies, NGOs and international development agencies, to contribute solutions to sustainability initiatives in about 60 countries of all continents and climates. His engagement in developing effective solutions to a broad range of issues has led him to very diverse professional activities. From time spent living and researching indigenous peoples' long term land-use strategies in the Amazon region of Brazil, in order to inform regional development policy; to contributing expertise to the world's largest-to-date corporate sustainability program at Walmart; developing innovative ecological pesticide reduction practices for a Pan-African program, financed by the DEG (German Bank for International Development) and the B&M Gates Foundation, benefiting almost one million small-holder farmers in 12 African countries; advising on mitigation options, after assessing the global sustainability and climate footprint of BUNGE, a giant multinational of the food and biofuels sector; coordination of a German government-funded climate mitigation project aimed at reducing carbon emissions of municipal companies of Cologne (current home) and Rio de Janeiro (his birth place); coordinating pioneering, breakthrough research into the use of saline water in agriculture, in the desert of Oman; long-term work in China supporting among others the development of management and inputs for chemical-free, healthy and productive orchards in the entire district of Beijing, protecting the ground water supply of the city; and many more interesting and effective projects.



Occupying a lot of his time have been his activities as a leading expert and pioneer in the field of organic agriculture, food and textiles, having helped clients worldwide produce safe and fair food, healthy and biodiverse landscapes, reduce their climate impact and create sustainable carbon sinks worth millions of tons of CO<sub>2</sub>. The phenomenal global growth of the organic sector in the last 40 years has been for him very rewarding and a clear indicator that it is worth dreaming and daring the impossible.

In relation to the Yangon Winter School he would like to contribute to concrete steps towards positive, sustainable and ecological action in the country. As a contribution to the local governance he would like to review and analyse the implementation requirements for Myanmar's Sustainable Development Plan from the perspective of a diverse set of stakeholders, at personal, corporate and public level. This program, worthwhile supporting, has been promoted by State Counsellor Lady Aung San Suu Kyi.

Caldas is familiar with the climate, socio-economic and environmental challenges of Myanmar having worked in many countries in the region such as Bangladesh, China, India, Thailand, Vietnam, etc.



## PANEL ABSTRACT

### Financing Ecological Developments in Agriculture and Forestry

### Available Sources of Funding and Sustainable Project Criteria

### Concrete Case Studies From Around the World

- The world is suffering from a myriad of problems: the unabated increase in CO2 emissions from rural, urban and industrial areas, with consequent extreme and fatal weather events and climate change; deforestation and drastic reductions in wild habitats and biodiversity leading to massive extinction of species many of them crucial for ecological balance; the contamination of food and the environment with toxic pesticides, and water bodies with soluble fertilisers; excessive and unsustainable use of water resources in agriculture; plastic contamination of soils, water bodies and oceans; and on the social sphere, persistent hunger, inequality and socioeconomic hardship in a world of plenty. All these factors are responsible for the current mobilisation and instability of society and protests in all continents.
- Since decades these issues have been identified as a result of a one-sided economic paradigm that generated plenty of profit for entrepreneurs and shareholders and on the other hand utter unsustainable value, tearing the balance and fabric of global natural ecosystems and communities worldwide.
- Many visionary individuals, entrepreneurs, politicians and corporate leaders have, in the last two decades, come to realise that the only way to operate sustainably in the world is by incorporating not just economic goals but also social and environmental wellbeing into their initiatives, programs and business strategies.
- That applies to small-holder farmers as much as to the heads of corporations generating hundreds of billions of dollars in revenue as well as financiers responsible for massive sovereign funds.

- Out of the 100 largest world economies 71 are nowadays corporations, and many of them have become examples of responsible citizenship incorporating corporate sustainability into all of their areas of operation and generating more impact than most of the world's charities, multilateral development agencies and governments put together.
- Responsible political leaders in charge of mega-cities have also realised that they hold the power to contribute to positive change globally. The C40 forum of cities has been collectively reducing their CO2 emissions and climate footprint to the rate of millions of tons of CO2 and now brings together 90 of the world's largest cities representing 700 million citizens. They are not waiting for central governments to act.
- But also individuals, and consumers have woken up to their 'buying power for the good'. Conscious consumers have transferred billions of dollars in value, through their purchasing power, to sustainable initiatives worldwide. These have been identified by a diversity of ecolabels sprouting out of the need to certify sustainable projects and products from agriculture, forestry and fisheries. Projects and products that respect the environment, as well as all people working along the value chain with fair wages and returns for their labour.
- And last but not least, the world of finance has followed suit creating financial instruments that focus on ethical, environmental and governance projects, enabling initiatives that decades before would not dream of getting finances and investments. We shall explore these sources of project support.
- I will explore in the panel (and the follow-up discussions), the necessary conditions for sustainable change and concrete examples of successful ecological agriculture worldwide where I have contributed.
- In a second panel on energy, traffic and the social dimension I will share examples of sustainable municipal initiatives and specially Germany's Smart Intermodal Mobility that has put people and planet at the forefront.
- Myanmar is ripe for a leap forward in sustainability leaving behind the old paradigms that led to so many problems.
- More than ever we need vision, courage, wisdom and leadership in the creation of sustainable value through sustainable development initiatives.
- It will be a pleasure to contribute to this visionary initiative started by Master Hsin Tao and Prof. Michael von Brück.



## Prof. Dr. Peter Edwards

Chairs of Sustainability Research initiative of Swiss Academy of Natural Sciences, Switzerland

Peter Edwards studied botany at Cambridge University, graduating in 1970. In 1973 he obtained his Ph.D. degree, also from Cambridge, for a thesis entitled Nutrient cycling in a New Guinea montane forest. He was a lecturer/senior lecturer in ecology at the University of Southampton, England, from 1973-1993. He is professor emeritus of plant ecology at the Swiss Federal Institute of Technology (ETH), where he worked since 1993, and. From 2013 until 2017 he was director of the Singapore-ETH Centre.

He is author of around 350 refereed scientific papers and author/editor of several books covering a wide range of environmental fields including ecosystem processes, insect-plant interactions, environmental management and biodiversity (h-factor 50). His recent research has focused particularly on large-scale processes in terrestrial ecosystems, including interactions between large herbivores and vegetation, the dynamics of vegetation on the flood plains of large rivers, biological invasions and the role of biodiversity in agricultural landscapes.

Peter Edwards a strong interest in the application of science and technology for better management. While at Southampton he was a director of the GeoData Institute, a contract agency undertaking environmental research and consultancy work. He was also a founder and first executive secretary of the Institute for Ecology and Environmental Management, a professional organization for environmental scientists in the UK. At ETH he was faculty coordinator and member of the executive board of the Alliance for Global Sustainability, a research partnership between several leading universities.



Besides his research and teaching, Peter Edwards has held a number of administrative responsibilities at ETH and elsewhere. These include membership of the ETH Research Commission and chairmanship of the Departments of Environmental Sciences (2000-2002) and Environmental Systems Science (2010-2013). He has been programme secretary of the British Ecological Society, a council member of the International Association for Ecology INTECOL, and president of the Swiss Botanical Society. Since 1997 he has been an editor of the journal *Perspectives in Plant Ecology, Evolution and Systematics*. He currently chairs the Sustainability Research Initiative of the Swiss Academy of Natural Sciences.



## PANEL ABSTRACT

### How to Turn Ecological Theory into the Art of Application? Experiences and Strategies

‘The world has problems while universities have disciplines.’ Environmental problems caused by human activities are increasing; biodiversity is disappearing at an unprecedented rate, soils are being irreversibly damaged, freshwater is increasingly in short supply, and the climate is changing. To reverse or even to reduce these trends will require a radical transformation in the relationship between humans and the natural environment. Just how this can be achieved within, at most, a few decades is unknown, but it is clear that academia must play a crucial role. To do this, however, academic institutions need to become more effective in helping societies move toward sustainability (Kueffer et al., 2012).

In my presentation, I will briefly discuss some of the barriers that prevent academic knowledge being usable for making better decisions. One barrier is that of complexity, which means that real world problems can rarely be solved through the insights of a single academic discipline. Ecological theory may provide useful insights into any environmental problems, for example, but the root of those problems is often social or economic or technological in nature. A second barrier, sometimes referred to as the salience challenge, is to present scientific knowledge in a usable form. All too often, information that would be highly relevant to a particular decision is not used, either because it is inaccessible or because its importance is not evident. And a third barrier is that of legitimacy, which means that the knowledge must be produced in a way that users see as “respectful of stakeholders’ divergent values and beliefs, unbiased in its conduct, and fair in its treatment of opposing views and interests” (Clark et al., 2016). This challenge is greatest in the case of problems for which any information is inherently uncertain and for which different stakeholders have strongly diverging interests or value systems. In these cases, which are typical of many sustainability problems, it may be impossible to separate clearly the process of producing facts from the process of interpreting them in support of a particular decision.



## PANEL ABSTRACT

### Biodiversity. How to Reconcile Biological Life and Economic Interests?

I will consider how biodiversity and economic interests can be reconciled, using green spaces and wildlife in urban areas as an example. The concept of “ecosystem services” refers to the benefits that people obtain from functioning ecosystems, including green areas within cities. These benefits are very diverse, but usually classified into four main types: provisioning, regulating, socio-cultural, and supporting ecosystem services. The first of these, provisioning ecosystem services, refers to the production of harvestable goods such as food, building materials, and fuel. The second is regulating ecosystem services, which helps maintain environmental conditions within safe or comfortable limits. Vegetation can have a big effect upon the urban microclimate and contribute to mitigating urban heat islands. Similarly, temporarily retaining rainwater, vegetation, and unsealed land can help prevent floods following heavy rain. A third type is socio-cultural ecosystem services, meaning those services important for human psychological well-being and culture. Trees and gardens increase the amenity value and attractiveness of the urban landscape, while nearly all green spaces offer recreational potential. As places where people meet, rest, and play, public green spaces foster social and cultural integration, especially among children and young adults. The final category, supporting services, underlies the provision of the other three, and contributes to the overall resilience of urban systems. Key supporting services include pollination, which help maintain plant populations and produce food, and biodiversity, which can increase the resilience of an ecosystem in providing services.

Given the economic pressures to develop land, it is unrealistic to expect the green areas in cities to persist into the future unless their value can be demonstrated, especially in financial terms. Among sources of value that can be readily measured, one of the most important in cities is amenity benefits, which can be assessed through the effects of green spaces and trees upon property prices



in the neighborhood (known as the “hedonic pricing method”). Other benefits relate to the regulatory functions of ecosystems, such as cooling, which can be assessed in terms of electricity saved, and reducing the risk of flooding, which can be assessed in terms of the cost of structures that would otherwise be needed to manage stormwater. Finally, the “contingent valuation method” allows researchers to assess other non-market benefits by asking people how much they would be prepared to pay for green spaces or urban ecosystems. Although far from perfect, these methods of capturing the value of biodiversity often provide impressive support for protecting these areas (Edwards, 2019).



## **Ms. Elisa Facchini**

Project Manager, Lampi Marine National Park, Myanmar

Elisa Facchini is an international development professional with a focus on environmental protection and biodiversity conservation. She holds a Bachelor degree in Development Studies from University of Sussex (Brighton, UK) and a Master's degree in Environmental Technology with a specialization in Environmental Economics and Policy from Imperial College London (London, UK). Since 2016 she has been working in Myanmar with Istituto Oikos, an Italian NGO operating in the field of biodiversity conservation and sustainable development. She is Project Manager of a conservation project in Lampi Marine National Park, Myanmar's only Marine National Park. In 2018 she has coordinated the participatory process of revision and updating of Lampi Marine National Park General Management Plan. Elisa previously worked on a rural development programme in Nepal and as project proposal writer for non-profit organizations in Italy.



## PANEL ABSTRACT

### Lampi Marine National Park: Engaging Stakeholders in Protected Area Management

Istituto Oikos is an Italian NGO operating in Myanmar since 2009 with the aim of promoting biodiversity conservation and the responsible management of natural resources. More specifically, Istituto Oikos works in collaboration with the Forest Department of the Ministry of Natural Resources and Environmental Conservation (MONREC) in Southern Rakhine State and Tanintharyi Region, including Lampi Marine National Park.

During this session, a short lecture will be given to present Istituto Oikos projects in Myanmar, with a special focus on conservation activities in Lampi Marine National Park, which is Myanmar's only Marine National Park and protects a rich biodiversity with more than 50 terrestrial and marine endangered species.

A workshop will then be conducted to reflect on the involvement of different stakeholders in the management of protected areas and natural resources. Firstly, the participatory approach used to develop Lampi Marine National Park General Management Plan will be presented, the importance of stakeholders' engagement will be discussed and common barriers will be identified.

A role play game will then be facilitated to simulate a situation in which different actors are involved in decision-making. Each participant will be assigned the role of a specific stakeholder participating in a group consultation and will discuss the scenario provided by the facilitator. The outcome of the discussion will be evaluated by an assessment team, which will work towards a solution to balance different concerns.

At the end of the role play, there will be a debriefing session to reflect upon learnings and challenges encountered, and to identify recommendations for engaging stakeholders in protected area management.



## **Prof. Dr. Nay Htun**

Founder of Green Economy Green Growth, Former U.N. Assistant-Secretary-General, (UNDP, UNEP), USA

Nay Htun is Founder and Honorary Patron, Green Economy Green Growth, GEGG Myanmar (not for profit) Association, Yangon <[www.geggmyanmar.org](http://www.geggmyanmar.org)> For the past decade, the Association organize GEGG Forums on green, sustainable, resilient, smart and inclusive development. GEGG also supports and hosts the ASEAN Institute for Green Economy, AIGE, an ASEAN Charter Entity endorsed by ASEAN Heads of States / Governments at the 25th ASEAN Summit in 2014.

He is a Fellow of Imperial College, the highest recognition the University can award for outstanding achievements; Adjunct Professor of Material Sciences and Chemical Engineering, Stony Brook University, State University of New York; Hon. Professor, Tongji University, Shanghai, China.

### **Selected Academic Affiliations:**

- Graduated PhD degree in Chemical Engineering, Imperial College.
- Visiting Professor Imperial College Centre for Environmental Policy;
- Visiting Professor & Intl. Advisor, Chulabhorn Research Institute, Bangkok, Thailand;
- Visiting Scholar, Harvard, Cambridge, MA;
- Visiting Scholar Fletcher School of International Law and Diplomacy, Tufts University, MA;
- Chancellor Distinguished Fellow, University of California, Irvine;
- Visiting Professor and Senior Advisor for Asia Pacific, International Insti-



Institute for Industrial Environmental Economics, Lund University, Sweden;

- Professor / Research Professor. Stony Brook University, State University of New York
- A Creator and Environmental Expert, 1990 Talloires Declaration, Association of University Leaders for a Sustainable Future
- Associate Chairman and Professor Department of Environmental Engineering, Asian Institute of Technology, Bangkok.

#### **Selected Appointments and Core Responsibilities included:**

- UN Assistant-Secretary General, exceptionally at UNEP and UNDP. At UNEP Paris (Senior Programme Officer, Industry & Environment Office), Bangkok (Regional Director, Asia Pacific Regional Office), Nairobi (Deputy Executive Director). At UNDP he was Assistant Administrator & Regional Director, Asia Pacific Bureau, New York, managed & supervised 24 Country Offices, directed large multi-year regional programmes that included negotiations, Chairing and establishment of and support for the Inter-governmental Mekong River Commission and the Tumen River Area Development Programme; Human Rights and Development; Strengthening the Role of Gender in Development; Energy, Environment and Climate Change; Development and Poverty Alleviation.
- Director and Special Advisor, UN Conference on Environment and Development, UNCED, aka the 1992 Rio Earth Summit; He was also the focal point for business and industry; helped established and liaised with the World Business Council for Sustainable Development, Geneva.
- Special Advisor, Asian Development Bank, advised and participated in the two years intensive inter-governmental preparations for the RIO + 20 Summit, Rio de Janeiro, Brazil
- Member, Town of East Hampton, N.Y Sustainable Energy Committee

#### **Selected Affiliations with not-for profit organizations, included:**

- Member, Board of Overseers, International Research Institute for Climate and Society, Columbia University, New York;
- Member, Board of Trustees, Institute for Global Environmental Studies, Hayama, Japan;
- Founder and Emeritus Trustee, International Vaccine Institute, Seoul, Korea;

- Member, Advisory Council for the Environment, International Council of Scientific Unions, Paris, France;
- Board Member, Stockholm Environment Institute, Stockholm, Sweden;
- Member, high-level China Council for International Cooperation on Environment and Development, Beijing, China ;
- Member, International Board of Advisors Urban Climate Resilience in SE Asia Partnerships a collaborative research and education programme coordinated by University of Toronto and Thailand Environment Institute.
- Advisor, Screen Scope Washington DC, producer of not-for profit award winning environmental documentaries, e.g. Journey to Planet Earth episodes shown on PBS.
- Editor, Sustainability Science Journal, University of Tokyo
- Chairman, Peconic Institute of Long Island, NY
- Member, United States Green Building Council, Long Island chapter.

#### **Private Sector Affiliations included:**

- Member, Dow Chemical's Corporate Environment Advisory Council, Midland, USA.
- Department Manager of the largest department of ESSO Thailand, a wholly owned subsidiary of Exxon

#### **Selected Awards, Recognitions :**

- At its 30th. Anniversary Commemoration in November 2014 was awarded the International Institute for Energy Conservation, IIEC, Washington DC Award for “outstanding contributions and guidance to the IIEC in its mission to accelerate energy and efficiency, promote sustainability and reduce GHG emissions in developing and emerging countries”
- The Chulabhorn Gold Medal
- The Newham Lecture, NZ Institute of Engineers

#### **Publications, Keynote Lectures :**

- 120 + authored / co-authored papers, reports, newspaper/ journal articles
- Keynote Speaker in many major technical international Conferences



## KEYNOTE SPEECH ON 8 JAN

### The Root Causes and Triggers of Environment and Natural Resource Conflicts

Throughout the history of human civilization, from the earliest time till the present and into the future, the condition of the Environment and Natural resources, such as land, rivers, water, forests have been the root source, cause and trigger of conflicts. Inequality due to endowment, development benefits, over-exploitation, and misuse, have contributed to and exacerbated conflicts of religion, culture, ethnicity, ideology, social and economics. Technology is also a contributor and increasingly so. Fire is a prime example of the benefits from and destruction caused by technology. Careful and prudent use brings benefits. Careless use results in untold damages.

The internet, just turned 50 years, is another example. The enormous benefits and the evolving social impacts of iPhones and social media are still not fully understood and have given rise to concerns and conflicts, especially with the availability of 5G and unlimited applications in all human activities.

Historically, environmental concerns and conflicts appear under many descriptions, e.g. public health, occupational health, air and water pollution, soil erosion and degradation, deforestation.

Many conflicts and wars have been and continue to be caused and triggered by water, in particular shared by two or more countries, and land.

A brief timeline will be provided since ancient time. Historical and contemporary evidence shows equitable and inclusive access to natural resources are essential to avoiding and preventing conflicts .

The encompassing term “Environment” is increasingly used internationally with the advent of the 1972 UN Conference on Human Environment, generally referred to as the Stockholm Conference, which recommended to the UN Gener-



al Assembly the establishment of the United Nations Environment Programme, UNEP. The Conference designated 5 June as World Environment Day. There is still no universal agreement on the term “environment” The Stockholm Conference considered the environment to encompass the “human environment” of ecological, social and economic spheres --- the three Pillars.

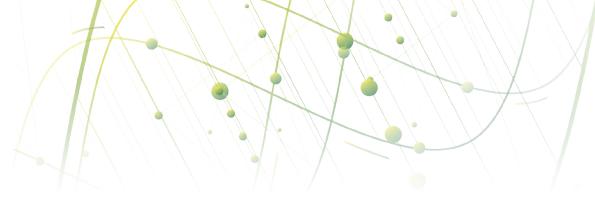
The unfolding impacts of the establishment of UNEP will be briefly described and its crucial role in the adoption of the Montreal Protocol.

To highlight causes of environmental concerns and conflicts and the process for resolution, the presentation will draw upon The Montreal Protocol on Substances that Deplete the Ozone Layer, adopted by Governments in 1987. This landmark multilateral environmental agreement regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone depleting substances (ODS). When released to the atmosphere, the chemicals deplete and destroy the stratospheric ozone layer, the thin layer shield that protects humans and the environment from harmful levels of ultraviolet radiation from the sun resulting in an increased incidence of human skin cancer and genetic damage in many organisms, causing impairment and destruction of biological system, ecosystem functions and the food chain. The Protocol is to date the only UN Protocol ratified by all 197 UN Member States.

Chlorofluorocarbons, CFCs, an ODS, will be particularly discussed. CFCs are a family of chemical compounds developed in the 1930's as safe, non-toxic, non-flammable alternative to dangerous substances like ammonia for purposes of refrigeration, air conditioning and spray can propellants. CFCs are also a greenhouse gas, contributing to climate change.

The presentation will provide a review of the scientific process. The discovery of the “ozone hole” promoted scientific research, inter-governmental assessments and increased public awareness and concerns. Public health played a critically important role in driving the response of Governments.

The manufacture of CFCs has been phased out under the Montreal Protocol and they are being replaced with other products such as hydrofluorocarbons (HFCs)



A full recovery of the ozone layer is expected by the middle of the century. The Protocol provides an inspiring example of what international cooperation at its best can achieve.

The recent worldwide mass demonstrations and protests on climate change, in particular by youth, are demanding actions now. Some emerging technological, economic, and financial, policy and legislative response to mitigate and adapt to climate change will be mentioned. The lessons learned from the Montreal Process are pertinent and relevant.

A fundamental and transformational transition towards a Green Paradigm is imperative to address the root causes, sources and triggers of environmental and natural resource destruction that exacerbates conflicts. Fast transition is imperative towards a Holistic and Integrated Sustainable, Resilient, Inclusive, Equitable future.



## **SPECIAL LECTURE ON 10 JAN**

### **The Pillars for Strengthening and Accelerating Sustainability : Economics, Social, Ecology, Energy, Ethics --- The Imperative for a fast transition towards a Transformational Green Paradigm.**

The presentation will provide an overview of the interconnectedness of Economics, Social, Ecology, Energy and Ethics. Energy, in particular fossil energy and carbon, will be discussed and its central role in human development, conflicts, peace, security and impacts on life on Earth. There is a growing need for fast transitions towards clean, renewable energy and a decarbonized future.

It will briefly review current scientific knowledge and increasing empirical evidence on the interacting and linked Ecological System of Atmosphere, Lithosphere, Hydrosphere, Biosphere and Cryosphere. Major transformations in the Ecological System are impacting on the “Human Sphere” of social, economic, financial and politics. And conversely and corollary, Human and Built systems continue to transform the Ecological System.

The “carrying capacities” and “outer limits” of these spheres are being exceeded with dire risks and consequences, some are irreversible. The magnitude and speed of the changes and their confluence are unprecedented in human history.

Contemporary history, starting with the industrial revolution in 1760 in manufacturing processes and production show that development, a vague and elastic term, have primarily focused on economic and finance. The social and ecological consequences were often neglected or secondary.

A quick review will be provided on the scale and speed of development during the past 250 years and the enormous consequences and the unfolding and unprecedented transformations.



Beginning in the late 1960s the ecological consequences of development were beginning to be increasingly articulated. Rachel Carson 1962 "Silent Spring"; Barbara Ward 1966 "Space Ship Earth", and with Rene Dubious 1972 "Only One Earth"; Margaret Meads 1928 "Coming of Age in Samoa," the 1964 "Continuities in Cultural Evolution" are some of the seminal writings that catalyzed and aroused public awareness and concerns on the state of planet earth. These led to the convening of the first of a series of major UN conferences, the pivotal 1972 UN Conference on the Human Environment in Stockholm, Sweden. And in 1993 the establishment of the United Nations Environment Programme, UNEP, by the UN General assembly.

The Human Environment encompassing Economics, Social and Ecological are seen to be the three pillars for promoting sustainable development, articulated in the historical 1992 UN Conference on Environment and Development (aka the Rio Earth Summit), and reiterated at the 2012 UN Conference on Sustainable Development (aka RIO +20) Brief summary highlights of the process and major outcomes of Declarations and Principles will be presented, with main lessons learned.

While three pillars (Economics, Ecology, Social) are much more sustainable, resilient, equitable and inclusive than one pillar (Economics) or two pillars (Economics and Ecology); they are still inadequate.

The imperative need for a fourth pillar, Ethics, has emerged.

A visionary, bold holistic Transformational Green Paradigm, integrating the four pillars, with multi and trans disciplines, sectors and stake holders, is emerging and will be elaborated, with an emphasis on the need for HOW actions to support the WHAT that needs to be implemented with alacrity.



## Prof. Kenneth Pugh

President and Director of Research at Haskins Laboratories, Yale University, and University of Connecticut, USA

Dr. Pugh is the President and Director of Research at Haskins Laboratories, a Yale University and University of Connecticut affiliated inter-disciplinary institute, dedicated to the investigation of the biological bases of language. He also holds academic appointments as a Professor in the Department of Psychology at the University of Connecticut, and as an Associate Professor in the Department of Linguistics at Yale University, and as an Associate Professor, Department of Diagnostic Radiology at Yale University School of Medicine. His research program over the last two decades employs integrated genetic, neuroimaging, and cognitive methods to explicate the brain bases attention, memory and cognition with special focus on typical and atypical language, and reading development in children. Dr. Pugh founded, and also directs, the Haskins Global Literacy Hub, an international and interdisciplinary collaborative that brings together scientists, practitioners, educators, policy makers, and education technology specialists with the broad goal of improving language and literacy outcomes for children across languages and cultures. A key focus of the Hub is to better understand how early neurocognitive development impacts later educational outcomes, and especially how children from under-resourced environments can be adversely effected by stressors associated with poverty (including nutritional issues, stress, and exposure to environmental toxins among other things). The goal of this hub is to design more effective birth-to-eight years interventions to mitigate risk and improve literacy and other academic outcomes.

In his professional work Dr. Pugh also serves in a number of advisory roles internationally, including the Scientific Advisory Board for the International Dyslex-



ia Association, the Scientific Advisory Panel for Dyslexia International in Paris, the Board of Visitors for the Learning Research and Development Center at the University of Pittsburgh, and the Scientific Advisory Council for the Child Mind Institute in New York. Dr. Pugh served as a Member of the Language and Communications Study Section at the National Institutes of Health (NIH), and also served as a member of the “Committee on the Learning Sciences: Foundations and Applications to Adolescent and Adult Literacy” at the National Research Council of the National Academies. In 2017, Dr. Pugh received a National Institutes of Health (NIH) MERIT Award from the National Child Health and Human Development Council Award. This award recognizes outstanding contributions to science with sustained NIH funding. In May 2019 Dr. Pugh received an Honorary Doctorate degree in Psychology from the University of Jyvaskyla in Finland.

Contemplative background: At the age of 16 Dr. Pugh began seven years of training as a Jain Monk (living both in the U.S. and in India). This early immersion in meditation practices and in the formal study of Jain philosophy (with its elevated emphasis on non-violence, ethics, logic, and epistemology) have shaped his approach to the study of brain and mind.

Representative publications (from > 100):

Pugh, K. R., McCardle, P., & Stutzman, A. (2017). Global approaches to early learning research and practice: An introduction. In Kenneth R. Pugh, Peggy McCardle, & Annie Stutz-man (Eds.), *Global Approaches to Early Learning Research and Practice. New Directions for Child and Adolescent Development*. 158, 7–10.

Pugh, K.R., Shaywitz, B., Constable, T., Shaywitz, S., Skudlarski, P., Fulbright, R., Bronen, R., Shankweiler, D., Katz, L., Fletcher, J., & Gore, J. (1996). Cerebral organization of component processes in reading. *Brain*, 119, 1221-1238.

Pugh, K. R., Frost, S. J., Rothman, D. L., Hoeft, F., Del Tufo, S. N., Mason, G. F., Molfese, P. J., Mencl, W. E., Grigorenko, E. L., Landi, N., Preston, J. L., Jacobsen, L., Seidenberg, M. S., & Fulbright, R. K. (2014). Glutamate and choline levels predict individual differences in reading ability in emergent readers. *Journal of Neuroscience*, 34(11), 4082-4089. PMCID: PMC3951703

Rueckl, J., Paz-Alonso, P., Molfese, P., Kuo,W.J., Bick, A., Frost, S., Hancock, R., Wu, D., Mencl, WE., Duñabeitia, J., Lee, JR., Oliver, M., Zevin, J., Hoeft, F., Carreiras, M., Tzeng, O., Pugh, K.R., Frost, R. (2015) Universal brain signature of proficient reading: Evidence from four contrasting languages PNAS 2015, 112(50) 155510-15515, doi:10.1073/pnas.1509321112



## PANEL ABSTRACT

### How to Turn Ecological Theory into the Art of Application? Experiences and Strategies

Among the biggest barriers to implementation of ethical, environmentally respectful, and sustainable policies are economic and political factors that subvert progress at multiple levels, and these will be discussed in detail by several participants in this Winter School in some detail. In my remarks, I intend to focus more at the individual learner; specifically, on how emerging approaches to formal (and non-formal) education might: 1) increase general understanding about risks and benefits associated with various ecological policies and programs and, 2) provide the learner with a deeper understanding of core principles in environmental science and related fields. Drawing from my recent experience as a co-chair on an ongoing UNESCO Global Education Assessment I will provide an update on some new and innovative environmental educational models that are emerging across diverse cultures. These models tend to place the individual in a larger ecological context. These models can provide the learner with critical information on the science underlying the global climate crisis, and the impact of environmental factors impact on the individual (including on neurocognitive development for infants and children in high risk environments), and how innovative and sustainable policies can benefit vulnerable populations in the global context.



## PANEL ABSTRACT

### Motivation and Change - Courage and Insight: Social-Psychological Aspects and Communication Processes

We live at a time of rapid advances in our understanding the neurocognitive foundations of perception, thought, and action, and how these mental processes allow the individual to make sense of the world around them (and their place in it). This understanding of the human mind benefits from progress in two often unconnected frameworks: 1) a rapidly expanding understanding of critical gene-brain-environmental relationships on cognitive development from within the broad disciplines of neuroscience, and, 2) a re-discovery older mental, ethical, and spiritual contemplative practices that can transform thinking and motivation in ways that result in increased flexibility/creativity and problem solving skills. Conventional biomedical research has tended to ask the following questions: "how does the brain give rise to thought and why do devastating neurological disorders occur?" Contemplative/mediation disciplines, by contrast, will tend to ask a very different question: "how well might the brain/mind work if we knew better how to harness its immense capabilities in an ethically-grounded manner?" Both approaches yield valuable information that can help to us to promote greater cognitive flexibility and creativity. And these skills, in turn are crucial in helping the individual both to adapt to a changing world, and to generate new and innovative approaches to improving it. In my remarks I will focus on the unique promise (and some challenges) associated with bringing these ancient and modern perspectives together to help improve readiness to embrace global challenges.



## **Prof. Dr. Eva Ruhnau**

Scientific Director, Human Science Center, Ludwig Maximilians University, Munich, Germany

Eva Ruhnau studied physics, mathematics and philosophy in Germany and Canada. She received her Ph.D. in mathematics from the Technical University of Munich. She was teaching at the Universities of Edmonton (Canada), Munich, Jena, Hamburg and Berlin. She worked as a researcher at the Department of Mathematics (University of Edmonton), Canada, the Max-Planck-Institute for Physics, Munich, the Institute of Medical Psychology (University of Munich), the Institute for Advanced Study, Princeton, USA, the Neurosciences Institute, La Jolla, USA, the Research Center Jülich and at the National Institute of Science and Technology Policy, Tokyo, Japan.

Since 1997 she is scientific director of the Human Science Center of the University of Munich. 2016/17 she was also guest professor at the Humboldt University, Berlin. She has worked and published in the fields of differential geometry, the concept of time in physics and philosophy and its mathematical modelling, the foundations of quantum theory and in the neurosciences. She has published approximately 50 articles and 4 books.



## PANEL ABSTRACT

# Good Governance and Ethics: Social-Psychological Aspects and Communication Processes – Change in Behaviour

The Human Science Center attaches importance to the “complementarity of anthropological universals and cultural specifics”, what units and what separates human beings. With this head line in mind, I propose to consider the following six pitfalls in communication processes:

### 1. Prejudices

Every point of view – either by an expert or layman – is unavoidably based on prejudices (premises), i.e. hypotheses as the corner stones of the world view. The detection of these prejudices is not easy because prejudices are necessary human conditions for perceiving and acting.

### 2. External perspectives

The refusal attitude to thematise these inherent premises leads often to the fixation on external perspectives. Concentration on technical and material problem solutions is taking place, the political, social and human problems are underestimated or repressed.

### 3. Thinking and arguing in extremes

In discussions and problem-solving scenarios, special situations and differentiations are neglected, metaphorically, there are no colours, there exist only black and white.

### 4. Truth

In arguing, the idea that there is only one truth is common. This is the world view of naive realism, independent of the perceiving subject, influenced by classical scientific thinking. On the other hand, there is the idea that what counts as relevant world is indispensable related to the structure of the perceiving subject. Therefore, differentiation between truth and accuracy (within a world view) should be taken into consideration.

## **5. Reflection and decision**

The refusal attitude to thematise these inherent premises leads also to a lack of reflection. It is characteristic for us humans that we have the ability that many of our actions can be based on reflection and not only on (conditioned) reflexes. There can be a gap between perception and action. We may have several options for possible actions, there is an “in between” in time. Each truly decision which action should be taken comprises uncertainty about the consequences. To reduce or avoid this uncertainty we produce a gigantic information flood, hoping to be able to deduce our decisions as provable and necessary. This seems to be like a global attempt to regain the paradise of reflexes.

## **6. Objectification and optimization**

Increasing complexity overtaxes human beings in the modern world. Therefore, it is necessary to set standards which were successful in the past and which define normality. For example, like in classical physics, ideas of biological (and medical) normality are pushed through which are determined by optimization. Such standards are globally easier to consume and to follow. And again, the debate about the background ideas of these norms is avoided for the most part.

To achieve better communications and good governance, the following three instructions may be helpful:

### **A) Scholastic rigor**

Reflexion of the six pitfalls should be practiced and also the ability to understand, repeat and endure the tension of controversial positions.

### **B) Art of acting**

The modern emphasis on feasibility, the overproduction of knowledge yield to an overproduction of static artefacts (things) and of information fragments and threatens our ability to act. We are in danger to produce actions like things to avoid this difficulty. Dynamical artefacts could standardize in subtle manners our human ability to act.



### C) Discovery of the “in between”

From human ethology and sociology, we know that the “we”, the group is defined by personal relations. In our globalized and individualized world, the solutions of many problems may be reinforced in temporally constructing context dependent encountering areas. In such “in between” zones it may be possible to develop and employ our best human abilities.

With these considerations in mind, we will also discuss the risks and chances of modern technologies, especially the evolution and application of artificial intelligence.



## **Ms.Tammy Turner**

Permaculture Institute, Taiwan

Tammy Turner is a Permaculture designer/educator based in northern Taiwan, where she has lived for over 30 years. Permaculture is a ecologically-focused, whole system design approach to creating healthy and regenerative environments. The three ethics of Earth Care, People Care and Fair Share (also known as Future Care) are core to Permaculture design and practice. Permaculture design ethics and principles inform the thought process involved in creating regenerative environments. She teaches/facilitates the Permaculture design process and leads the build out of community-based Permaculture projects. She also designs and facilitates community-supported farming projects on larger sites in central Taiwan and in Hong Kong. She has received Permaculture design training from Robyn Francis, Geoff Lawton and Sepp Holzer, some of the most respected Permaculture teachers in Australia and Europe. She has also learned from indigenous elders traditional forest gardening and resource management practices and skills. Her strengths are in Permaculture master planning and design, social and community-focused edible landscapes and farming, food forestry and agroforestry projects in warm temperate/subtropical/tropical climates. To date, she has led dozens of community-focused Permaculture projects involving education and training, participatory design and community building primarily in northern and western Taiwan. She has also taught or co-taught as the main instructor of over twenty Permaculture Design Certificate (PDC) courses in Taiwan, Hong Kong, China and India.

Prior and concurrent to her journey to becoming a Permaculture designer and educator, she has been deeply involved in social and environmental movements in Taiwan. She has also designed and managed large-scale international, multilingual communications projects for government agencies in Taiwan and multinational companies operating in Asia through Pristine Communications, a communications and technology service company owned and operated with her husband. She is bilingual in Chinese and English.



## PANEL ABSTRACT

### Transformations in Energy and Traffic – Technologies, Changing Infrastructure and the Social Dimension

Bioregional planning according to Permaculture design ethics and principles would focus on deep analysis of the natural, social and services “catchments” to establish equitable and ecologically responsible strategies for development, resource use, etc. Communities that seek to become carbon neutral will need to be designed according to patterns that work with nature. Thus, the design of housing, food production, education, social engagement and mobility must mimic biological and ecological systems. Transportation would be considered in the context of the energy (carbon) constraints and the ability to meet as much local needs within the local environment as possible, thus reducing overall travel distance and frequency. To achieve such an arrangement, cooperative housing and community design would focus on local food production, schools and shops, and greater autonomous administration and infrastructure design would facilitate the efficient use of resources within a given scale, i.e. neighbourhood, community, town, city, etc.



## PANEL ABSTRACT

### Biodiversity. How to Reconcile Biological Life and Economic Interests?

There is no possibility of an economy without biological life or biodiversity. The very web of life, from the smallest microbes to the largest organism (fungi!) and mammals, we depend on the biological services of not just individual plants, trees or animals but the ecological and natural systems to which they belong. Economic interests within the current global economic paradigm do not value and cannot value these essential biological services because it is only by their disappearance and conversion into a commodity do they gain value, to the point that clean water and air and healthy soil are becoming increasingly precious by the day. The solution must therefore be one that reasserts the sacredness of life and living systems. This is why as Permaculture practitioners and designers our core ethics are Earth Care, People Care and Fair Share, wherein we not only protect the environment but regenerate and restore degraded landscapes, care for people through empowerment, community building, and return of the surplus from our efforts into the continued service of Earth Care and People Care.



## Prof. Dr. Ovid Tzeng

Chancellor, Taiwan University System, Taiwan

Professor Ovid Tzeng is the chancellor of University System of Taiwan and academician of Academia Sinica. He was the Minister of Education, the Minister Without Portfolio, and the Minister of Council for Cultural Affairs. He is an outstanding researcher in Cognitive Neuroscience and Neurolinguistics and an experienced leader in academic institutions. He serves as a member of the Board of Directors of Haskins Laboratories in the U.S. and an advisory board member of the ARC Centre of Excellence in Cognition and its Disorders in Australia. He has also been elected to be the academician of The World Academy of Sciences (TWAS) since 2010 and active member of The European Academy of Sciences and Arts since 2017. He has been the Chancellor of University System of Taiwan for several years, which was created by him and established to oversee and integrate the research and teaching developments of Taiwan's four top research universities, namely, Central-, Chiao-Tung-, Tsing Hua- and Yang Ming University. Prior to the Chancellorship, he was the Vice President of Academia Sinica in Taiwan, in charge of International Scholarly Exchange Program as well the developments of Taiwan's International Graduate Program (TIGP). He is currently an Executive member of the Committee on Human Rights of the NAS, NAE, and NAM, as well as a member of the UNESCO's Inclusive Literacy Learning for All Project.

## **PANEL ABSTRACT**

### **Good Governance, Artificial Intelligence and Ecology-New possibilities for leadership and change in behavior?**

### **Future Learning with an Augmented Intelligence**

Compared with other animals, human being developed quite a tremendous ability to invent and refine tools in order to control and improve both physical and mental worlds, hence, resulting in a complex and fast-moving human society, which can be characterized as an interactive model of 8-O (Bio-Geno-Neuro-Cogno-Info-Techno-Medico-Cultural/Socio) features.

Right now we are in a digital world in which high tech and Internet make us connected socially, intellectually, and spiritually, in both horizontal as well as vertical ways. With respect to health care, big data of health related informatics, data sciences, and AI make preventive and precision medical care possible. It is also very clear that cultural specificities and social values are under rapid changes due to trans-world business and industries as well as to convenient and accessible transportation in air, sea, and high speed rails on land across continents. One obvious behavioral consequence of reorganizing the brain/mind connections is transforming the architect of human information processing (HIP) from a purely primary biological learning machine up to a secondary cognitive learning platform which allows hierarchical organization and strategic planning, thus uplifting the quality and flexibility of fast and precise storage/retrieval operations. In a sense, future learning may be characterized by an interactive convolution of mixed properties of dynamical system, which can be expressed in terms of an augmented intelligence as a result of problem solving and actively changing environments, and can be characterized as  $f(\text{THIP} \times \text{PBL} \times \text{SCL} \times \text{K} \times \text{E})$ , in which THIP refers to transformed human information processing, PBL refers to primitive biological learning, SCL refers to secondary cognitive learning, and K refers to knowledge, and E refers to experience.



In other words, leadership in a future complex world involves exercises of strategic thinking and meaningful execution for solving complex problems, rather than just performing a learned action plan. From this perspective, we also need to discuss the implications of artificial intelligence (AI). Human being creates artificial intelligence (AI) by syntax and software engineering to replace routine as well as complex procedures in problem solving. In certain specific domain areas, AI challenges and outperforms human's natural intelligence (NI) without "PERSONAL" knowledge, which allows "compassion," "curiosity," and "feeling of knowing" about the domain specific problems.

Basically, AI is a sophisticated tool with fast speed, humongous storage of data, and a very powerful computation based on deep learning algorithms. Recent triumph in chess games by Deep Mind's AlphaGo and AlphaZero shows strategies, understanding, planning, and insight: No more brute force of machine calculation. For example, AlphaGo worked by training a deep neural network to predict the value of board positions, using millions of past games as training data; furthermore, AlphaGoZero, learned purely by playing itself, and later, AlphaZero took things further by training a single network, again entirely through self-play and without any game-specific knowledge, to deliver world-beating performances in three different games: Go, chess, and the Japanese game shogi. Now, AlphaFold extends its computation power out of its specific domain, built on years of prior research in using vast genomic data, to predict accurate 3D models of proteins structure.

In retrospect, from AlphaZero, AlphaZero, to AlphaFold, AI succeeded by thinking smarter, not faster; it was wiser, knowing what to think about and what to ignore. In a sense, AI is simulating human mind by exploring various computation algorithms. But, can AI be more compassionate and has spontaneous curiosity about the world and themselves? Will it appreciates, enjoys, and seeks mindfulness in its living experience? Is it possible that AI has developed a theory of mind and can produce spontaneous improvised humor? Let us use our NI and try to visualize the future AI. At this moment, AI provides an opportunity to augment our human intelligence in the following formula:  $(AI \times NI \times K \times E) =$  Augmented Intelligence (Almost Infinite Expansion of Smarter Intelligence). In other words, in the future world, two brains (AI and NI) are better than either one brain. Our next big job is to find out What, Why, and How?

## **PANEL ABSTRACT**

### **How to Organize interdisciplinarity as a Productive Tool to Ecological Change?**

### **An Interdisciplinary Solution for Smart Future Agriculture**

The earth is in deep trouble physically from the polluted land to the polluted sea and to the polluted air. We also witnessed more and more extreme weather changes due to global warming. Shortage of safe food production is at the corner everywhere. In 30 years, the total global population is expected to reach 7.5 to 10.5 billion, which undoubtedly will intensify the pressures of food demands and escalate the food prices. The complex problems cannot be solved by any single discipline. They call for an interdisciplinary and cooperative effort to reach a smart solution. First of all, it requires an agricultural designer to develop a whole green and smart agricultural total solution for growing healthier high value crops in the aid of intelligent management. Through sensors, smart devices, internet of things (IoT), and big data analysis, we can digitize knowledge, automatize production, and simplify operations in order to optimize products, which can be traced through computerized systems for the purposes of intelligent production and digital marketing. Second, we need we need to integrate various useful technologies to complete a customized designing of farm, thus, lowering the threshold of technology farming and create a smart farming managing environment for new generation. Third, the core farming technologies should include non-toxin environmental monitoring, bacterial distribution database, pests and fungal diseases AI forecasting system and eco-friendly bio-pesticides. Also, CRISPR-cas9 technology in genetic research will be an important tool to be implemented for disease control. Finally, intelligent production technologies and smart management applications can help all farmers overcome challenges and increase overall production efficiency and quantity, in order to ensure food safety of crops, increase profit of farmers, most importantly, lower the burden of environment. With such a vision of smart agriculture which requires the integration of knowledge across disciplines, experimental programs are currently in place at the southern campus of the National Chiao Tung University. These are all new programs to be implemented and I will highlight some of them in our panel discussions.



## **Prof. Dr. Anastasia Zabaniotou**

Department of Chemical Engineering, Aristotle University of Thessaloniki, Greece

Anastasia Zabaniotou is Professor at the Chemical Engineering Department of the Faculty of Engineering, at Aristotle University of Thessaloniki, Greece. She holds a Ph.D. and a DEA from Ecole Centrale de Paris, France. She has been working at the European Commission, DG for R&I, as an officer and she still works as an expert.

She is the chairperson of Bioresources and Bioenergy at the International Renewable Energy Network and Conference (WREN/WREC, UK) and member of the Chinese Network on Energy and Environment (BEE-RCN, China).

She is member of the International Collaborations Committee at Aristotle University and coordinator of T.I.M.E network at her University (International Network for a double degree, coordinated by Ecole Centrale de Paris) and board member of RMEI (Network of Mediterranean Engineering Schools) that has as mission the engineering education for implementing Sustainable Development Goals and Peace in the Mediterranean region.

She is interested in multidisciplinary and interdisciplinary research and education. She is involved in activities concerning science and society, environmental and sustainability awareness and climate change, renewable energy, sustainability, resilience and gender equality.

Her research focuses on cascade use of biomass with materials closing loops and renewable energy, waste to energy, biofuels, and sustainability, by embracing inclusivity and social acceptance. She has been involved and coordinated many national, European and international R&I projects.



Her work was awarded for innovation and excellence 8 times. She is author and co-author of 120 papers in international journals and ~250 conference presentations.

She has visited more than 40 countries/Universities worldwide and invited at many international conferences as keynote speaker. She also organized several conferences, workshops and events.

She organised the Re-Greece International Symposium and Workshops in Greece on 2016 on 'Circular Economy and Sustainable Use of Bioresources in the context of Climate Change and Social Upheavals'.

On August 2018, she was honoured to be invited by the WORLD ENERGY FORUM as Keynote speaker, at the International Inter Mongolia Energy Conference 2018, China. The same year she was awarded for excellence in her research on Bioenergy by WREC (World Renewable Energy Conference in London).

On January 2019, she awarded by Aristotle University for her International collaborations and activities.

She believes that creative and transformative learning deserves a bigger role in education for an awareness that is interrelated with technological achievements, inventions and innovations. A long-lasting change in any social or environmental system can be brought by understanding the connection between our consciousness, thoughts and actions, and their impact on the world/planet. Thus, she is interested in teaching that brings understanding of the relationships between awareness and actions, in establishing a value-based education through which young scientists could participate to bring sustainable solutions and desired results for peace and wellbeing of the entire world.



## PANEL ABSTRACT

### Sustainable Responses and Innovations towards Reconciliating Bioresources and Economic Interests

Global challenges are complex and interrelated. Solutions need interdisciplinary knowledge, system approach, collaboration and increased human ethical responsibility. Global transitions are required with a new mindset that needs to be integrated in decision-making. Education for sustainability plays a pivotal role in societal change. Education transition requires an interdisciplinary approach of natural, technical and social sciences, and the applicability of virtue ethics and local knowledge in innovation, encompassing social perspectives of participation and change leadership. A transformative learning is needed for a shifting from the dysfunctional patterns of interactions causing current complex and wicked global challenges into a more life-enhancing functional one. Sustainability is related to systemic health and resilience at different scales, from local, to regional and global. Sustainable development requires adaption to and mitigation of climatic change, as well as long-term resources and energy security, which puts high demands on renewable energy sources, energy and material higher efficiency. Systems need to be analyzed together with significant interacting systems such as ecosystems, in planning and decision-making.

This presentation aims to highlight the pathways for the transition to Sustainability, by discussing sustainable responses and innovations towards reconciliating bioresources and economic interests. The miracle of Bioresources genesis (photosynthesis of terrestrial and marine biomass) and sustainable biomass uses are presented through the lens of environmental, technical, economic, social, and philosophical approaches considerations. The Biocapacity concept and its balance, dimensions of Sustainability, Circular Economy and Bioeconomy concepts as pillars of sustainability, are discussed. Emphasis is putting on the sustainable use of Renewable Bioresources to produce food, fiber, bioenergy and bio-based products, towards a Bio-based Economy. Biomass projects on biofuels production and cascading bioenergy systems involve various stakeholders (farmers, end users, local planners, non-governmental organizations (NGOs),



government representatives, industry and communities), who play an important role in bioresources exploitation. For resilient infrastructures and communities in the context of sustainable regional development, technology, regional approaches, socio-economic and environmental aspects including Public Acceptance, need to be appropriately addressed and bonded to local knowledge, ethical, legal and social impacts aspects in the technology and product development, with inclusiveness and responsiveness.

Nature-based solutions and Biomimicry practices of the Green Economy encourages a new industrial paradigm. Enabling technologies are leading to Business Approaches, where technology-driven innovation is replaced by the Responsible Research and Innovation (RRI, a European Commission approach aiming to foster the design of inclusive and sustainable research and innovation policy and align research and innovation to the values, needs and expectations of society. Beyond scientific/technological progress and economic growth, the goals aim at Ethical and Social Fulfillment.



## Dr. des. Alexander Benz

Human Science Center, Ludwig Maximilians University, Munich, Germany

Alexander Benz is a lecturer and scientific coordinator at the Institute of Medical Psychology of the Ludwig Maximilian University, Munich, Germany. He has been legally trained at the University in Freiburg, Germany and the German University of Administrative Sciences Speyer, Germany. He received his mediation and arbitration training at the University of British Columbia, Vancouver, Canada. He has been a member of the German Bar Association since 1999.

He has been working as a business coach and consultant with a variety of local and international businesses like Mercedes-Benz, Stuttgart, Germany and the FESTO Group, Esslingen, Germany improving strategy and knowledge processes.

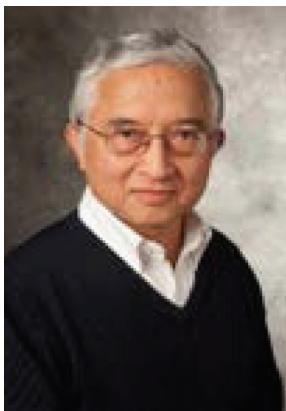
In 2006 he started working with Applied-Knowing Project at the Human-Science-Center of the Ludwig Maximilians Universitaet Munich and Prof. Ernst Poeppel to develop new forms of learning and teaching. In 2011 he became a lecturer at the Institute of Medical Psychology. Since then he coordinates the teaching efforts and teaching innovations of the institute for 850 students every semester.

His research interests revolve around educational psychology with a focus on individualized, explorative or problem based learning. Over the past years sustainability, interdisciplinarity and communication in healthcare complemented his research field. He is the author, co-author or editor of several international reports, articles and handbooks conference presentations.



Over the last decade he has managed a EU-funded multi-national Chronobiological research project (Euclock), has initiated and coordinated quite a few international Erasmus+-projects with the State Academy for Teacher Training in Esslingen (MC4VED – Mass Customization for Vocational Education and DESK-Development and Saving Critical Knowledge in Organizations for vocational Education).

He believes that we are living in a knowledge driven society in which sometimes crucial knowledge is lost or forgotten and in which many do not realize that knowledge is quite likely the single resource that increases and grows when you use or even better share it. Therefor the future of science, society and the environment depends on our ability to make better use of all our knowledge and skills and that we all have to co-creatively collaborate and communicate better to make this world a better place for us but also for the future generations.



## **Prof. Dr. Ruben Habito**

Southern Methodist University Dallas, Texas, USA

Ruben L. F. Habito, a native of the Philippines, is Professor of World Religions and Spirituality, and Director of Spiritual Formation at Perkins School of Theology. He has also served as Associate Dean for Academic Affairs (2005-2008). Before coming to Perkins in 1989, he was a member of the Society of Jesus for twenty-five years, and taught at the Jesuit-administered Sophia University in Japan.

After finishing undergraduate studies at the Ateneo de Manila University in the Philippines, Habito completed his Master of Arts and Doctoral studies in Buddhism at Tokyo University and Licentiate in Sacred Theology at Sophia University in Tokyo. His academic interests include East Asian Religious Studies, Buddhist Critical-Constructive Thinking, Comparative Theology, Issues in Religion and Society, Spirituality and Socio-Ecological Engagement, Interreligious Studies, and related areas.

He is the author of numerous articles and books in Japanese and English, including *Be Still and Know: Zen and the Bible* (Orbis 2017), and *Zen and the Spiritual Exercises* (Orbis 2013). He also serves as Guiding Teacher of the Maria Kannon Zen Center, and resides in Dallas with his wife Maria Reis Habito, and together they have two adult sons, Florian and Benjamin.



## **Dr. Maria Reis-Habito**

Program Director, Museum of World Religions, Taiwan

Maria Reis Habito is the International Program Director of the Museum of World Religions in Taipei, organizing symposia and conferences on Interfaith themes from her Dallas office. She is also the US representative of the Elijah Interfaith Institute, and has served as an advisor to the Fetzer Institute Council on World Religions and Spiritualities. She is also an authorized Zen teacher in the Sambokyodan lineage. Previously she has served as Adjunct Faculty member of the department of History and also of the Master of Liberal Studies Program at Southern Methodist University, having taught courses on East Asian History and other subjects related to Asian Religions and Spirituality. She received her Ph.D. from the University of Munich, and also studied in Taipei, Taiwan and Kyoto, Japan. Her published works include academic titles in German, and also edited works in English, such as *The Way of the Heart: Teachings of Dharma Master Hsin Tao* (Create Space Publishing 2016); *Heart to Heart: Buddhist Muslim Dialogues in Ladakh*, 2010, and *Listening: Buddhist-Muslim Dialogues 2002-2004* (MWR Taipei, Taiwan) as well as numerous articles in scholarly journals.



## **Prof. Dr. Myint Thu Myaing**

Dept. of Law, University of Yangon, Myanmar

Dr. Myint Thu Myaing is a Professor and Head of the Law Department, University of Yangon in Myanmar. I received my first law degree in 1985, then an LLM in 1992 and a PhD in 2005 from the University of Yangon, as well as a Diploma in Management and Administration in 2000 from the Yangon Institute of Economics. In 2003, I was also awarded an LLM in Intellectual Property Law from WIPO and Turin University in Italy. Since 1986, I have been teaching at the University of Yangon, East Yangon University and Mawlamyine University in Mon State in Southern Myanmar. I teach full-time LLB and LLM courses, Diploma Course in Business Law and Intellectual Property Law for public servants and professionals, and a PhD preliminary course at the University of Yangon. My teaching subjects are Intellectual Property Law, International Environmental Law, and Investment Laws. The fields of expertise and research interest are Intellectual Property Law, International Environmental Law, and Investment Laws. I have been supervising theses of Master's students and dissertation projects of PhD candidates. I also teach Environmental Policies and Laws subject for Post Graduate Diploma in Environmental Studies (PGDES).

## **PANEL ABSTRACT**

### **Laws Relating to Environmental Conservation in Myanmar**

Environmental law is a law which controls and regulates the human impact on the environment. Man utilizes the environment not only to survive his life but also to improve his living standard by exploiting the national resources and, at the same time, causing pollution to the environment in which he is living in. The environmental problems do not have boundaries. Therefore various international environmental agreements have been concluded and national laws have been enacted to control the pollution and other environmental damages. Countries promulgate and amend their internal legislations and administrative measures for the purposes of protecting the environment and promoting environmental management and sustainable development. Myanmar Government has an obligation to protect and conserve natural environment according to the Constitution of the Republic of the Union of Myanmar, 2008.

At the international level, Myanmar has participated in several international agreements relevant to Myanmar and has signed, ratified and acceded to International Environmental Conventions. At the national level, it also proclaimed the national environment policy. The Penal Code provides penalties for offences affecting public health and environment. Myanmar main legislations related to environment are the Environmental Conservation Law, 2012, the Environmental Conservation Rule, 2014, the Environmental Impact Assessment Rules, 2015 and Myanmar Agenda 21. Moreover, Myanmar has enacted many laws related to environment for different sectors, such as, administrative sector, agriculture and irrigation sector, culture sector, city development sector, finance and revenue sector, forestry sector, health sector, hotels and tourism sector, industrial sector, livestock and fisheries sector, mining sector, national planning and economic development sector, science and technology sector, and transportation sector.



## **Prof. Dr. Khin Khin Soe**

Dept. of Geography, University of Yangon, Myanmar

### **Studies**

PhD – 2003 - 2008- at the Department of Geography, University of Yangon

M.A - Dec 1993-Dec 1995: Department of Geography, University of Yangon

B.A - Dec 1983-Dec 1987: Department of Geography, University of Yangon

### **Duty and responsibility:**

Secretary at the international conference on Transformation Processes in Myanmar II, III and IV (2017-2019) conducted by University of Yangon, Myanmar and Cologne University, Germany

Teaching, Research, Co-leader in Center of Excellence for urban and regional development (CoE), Core team member in Quality Assurance (QA) Curriculum Development for Post Graduate Diploma in Environmental Studies University of Yangon, Conducted by Simon Fraser University 2019

### **Academic work**

1990-1997 : Primary Teacher, Natsingone Basic Primary School, Thanlyin Township, Yangon Region

1997-2005 : Tutor, East Yangon University, Thanlyin Township, Yangon Region

2005-2010 : Assistant Lecturer, Hpa-an University, Kayin State, Myanmar

2010-2015 : Lecturer, University of Yangon

2015-now: Associate Professor, Taungoo University and University of Yangon

## **Teaching Profiles**

1. All subjects in under graduate programme
2. Master Programme
3. Post-Graduate Diploma (Environmental Studies)
4. Post-Graduate Diploma {(Geographic Information System (GIS)}

## **Research focus and research projects**

The “81+ Urban Network System ” is a research project jointly conducted by the Institute of Geography, University of Cologne/Germany, University of Yangon, the Department of Urban and Housing Development (DUHD), Ministry of Construction/the Myanmar German Research Cooperation for Urban and Regional Development, the Department of Geography and Centre of Excellence (CoE) for Urban and Regional Development at the University of Yangon. Conducted projects included: 18th Feb- 25th Feb 2018 Field research in Nay Pyi Taw with the topic “Education, Health Housing, Demographic and so on; Development of Nay Pyi Taw”. 11st Sep – 24th Sep 2017 Field research in Myawady, Bago and Hpa-an with the topic “ Heritage and Development of Bago”. 24th Feb – 3rd Mar 2017 Field research in Lashio with the topic “Trade and Development of Lashio”. 22th Feb – 3rd Mar 2015 Field research in Chin State with the topic “Agriculture and Development potential of Hakha and Falam , Chin State”. 20 th Feb – 3rd Mar 2013 -2014 Field research in Taunggyi, Sagaing, Pyay and Mawlamyine with the topic “ Agriculture and Tourism Development ”. 8th Nov – 14th Nov 2013 Field research in Mawlamyine (Myanmar): Agriculture development for “81+ Urban Network System” research project.

## **Current Research Project**

1. Multiple Risks Management in extreme events in fast growing (mega) cities in Myanmar, which is jointly conducted by Prof. Dr. Frauke Kraas, the Institute of Geography, University of Cologne/Germany, Yangon City Development Committee and University of Yangon/Myanmar.
2. Risks Preparedness and Role of Education in informal settlement in Dagon Seikkan Townships, Yangon, Myanmar: Preliminary survey on Ward no.67.
3. Urban Heritage in Mawlamyine City, Mon State, Myanmar which is jointly conducted by Prof. Dr. Frauke Kraas, the Institute of Geography, University of Cologne/Germany.



## PANEL ABSTRACT

### **Urban and Rural development in Myanmar: impact of urban agriculture**

Urban agriculture contributes to local economic development, poverty alleviation, the social inclusion of the urban poor and women, as well as to the greening of the city and the productive reuse of urban waste. This study aimed at finding out the relationship between urban agriculture and the environment. Urban agriculture in Myanmar has taken place since 2000. Agriculture being the main economic activity in Myanmar means that urban agriculture will most likely continue to be practiced and evolve consequently impacting on the different environment. This paper therefore aims at identifying the practice of urban agriculture, why agriculture is carried out and the general impact of the practice on the environment. Urban ecosystems have both health risks and economic and environmental benefits for producers and consumers. Agriculture is a key part of the eco-system, generating risks through use of toxic inputs in densely populated areas and vulnerable at the same time to becoming a pathway for biological and chemical contaminants in the ecosystem, directly via soil or water to producers and indirectly facilitating the passage of contaminants into urban food systems. Farmers are often oblivious to the negative health effects that can result from using either very toxic or unsafe pesticides, or simply using too much of it. The study results showed that cultivation took place on own/family land, along the river/road. Urban farming in Myanmar division plays a major role in making the population food secure. Furthermore, especially in Chin state, any surplus was sold to generate income and the money used in other things such as paying school fees, clothing and investments. In Myanmar, especially gardeners from Hamwbi, Tyeikkyi and Hlaygu townships are doing the urban agriculture.

Keywords: urban agriculture, Myanmar, environment, ecosystem, impact



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Dr Larry Wong has over 40 years' operational experience in development and business planning and implementation, and policy analysis. His engagement continues to straddle the public and private sectors as well as think tanks and international development agencies. His key areas of expertise include developing and managing agro-food supply/value chains and trading networks; agribusiness and agro-enterprises; Public-Private-Partnerships in agriculture; regional integration; food security (within the food-water-energy nexus framework); and sustainable development. He is the Co-Founder of Myanmar Praxis Co Ltd.; Director of Lannew Resources Sdn Bhd; Senior Advisor to Myanmar Rice Federation (MRF) and its business arm, Myanmar Agribusiness Public Corporation (MAPCO); and Visiting Fellow (Ex-Program Director), Institute of Strategic and International Studies (ISIS), Malaysia and Visiting Research Fellow in Center of Economic and Social Development (CESD), Myanmar. He has a PhD (Economics) from the University of Kent-at-Canterbury, UK; and M. Ec. (Agriculture Economics & Business Management) from the University of New England, Australia.

He has consulted for The World Bank, International Finance Corporation, Asian Development Bank, United Nations Development Program, Food and Agriculture Organization, UNESCAP, International Food Policy Research Institute, USAID and International Rice Research Institute as well as governments and business conglomerates in Malaysia and Myanmar as well as in Vietnam, Lao PDR, Cambodia, Indonesia, and Thailand in ASEAN; Guinea, Ghana and Mozambique in Africa; as well as Cuba, Mongolia and Uzbekistan.

He has been involved with Myanmar's private and public sectors since 1997, when he was heading BERNAS' (a Malaysian public listed, privatized former state trading enterprise) international agribusiness, involving the development and management of supply chains and trading networks, spanning Asia and Africa. His subsequent consultancy, think tank, and international development agencies engagements have taken him to practically all regions of Myanmar in relation to climate-smart agribusiness value chains ('from seed to shelf' and 'from farm to fork') for rice, pulses, oilseeds, fruits and vegetables, and fisheries and their respective trading networks via normal as well as border trade.

He is a Board Member of the Asia Pacific Agriculture Policy (APAP) Forum and a member of the Editorial Board of the Asian Journal of Agriculture and Development (AJAD). He practices Vipassana meditation and goes for annual meditation retreats at Panditarama Forest Meditation Center, Myanmar since the late 1990s, where he often enters the monkhood.



# 冬季學校 2020

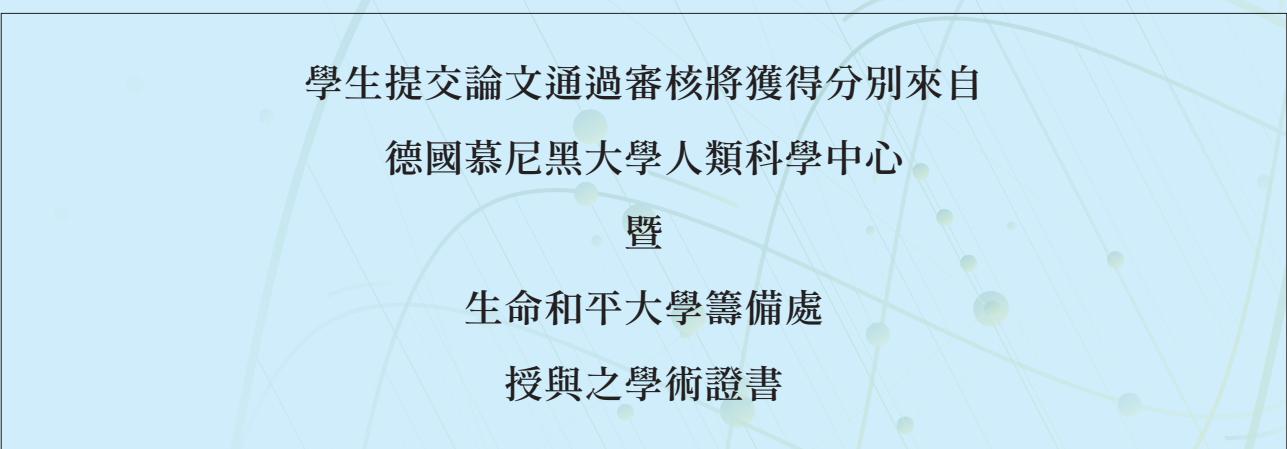
## 緬甸仰光

1/ 8–18, 2020

### 療癒地球

### 生態與科技的轉換行動

為籌建緬甸生命和平大學，台灣靈鷲山佛教教團與德國慕尼黑大學人類科學中心及世界各地的學術機構合作，進行冬季學校之課程計畫。



學生提交論文通過審核將獲得分別來自  
德國慕尼黑大學人類科學中心  
暨  
生命和平大學籌備處  
授與之學術證書



# 序文



## 心道法師

各位尊敬的老師，以及令人期待的學員，大家好，平安吉祥！

第二屆生命和平大學籌備處籌劃的冬季學校即將在緬甸仰光開學，僅此之際，本人由衷感恩全球護持本計畫的一切善緣，也代表所有籌備處專業成員所背負的嚴肅責任，發出殷殷期待與仰望的虔誠。

經過 2019 年第一屆「解決生態危機的根源—邁向新策略」的主題定位，有 10 位世界知名教授受邀參與並熱忱指導，我們有 25 位具有不同學術領域的學生參與課程訓練。由於研究方法採跨領域整合，研究目標與行動方案搭配得宜，不僅在緬甸引起關注，也在學界得到深刻迴響。後續經過近半年，師生不斷研討淬鍊，共有十五份個人及小組論文通過審核，被授予結業證書。這一成果，也為我們的大學計畫邁出歷史性、具指標性的第一步。

有了第一屆的經驗作基礎，我們沉澱反思，審慎提出「療癒地球一生態與科技的轉換行動」作為本屆主題。關於師資，則延攬到更多一流大學的頂尖教授的支持，學生徵選除了專業優異，還需要具備責任感與企圖心，令人振奮的，我們很榮幸得到緬甸仰光大學、巴利大學的高度重視，校方派出優秀師生來參與，給我們打氣，也讓我們的努力更具在地性的實踐意義與價值，對於靈性與科技對生態修復的這種新型態一體整合的教育範式，相信有更好的融入，並證明其效益。

隨著世界局勢的詭譎莫測，與時俱進的人類意識，問題根源總是解決的關鍵，透過第一屆辦學心得，讓我們總結出更明確的和平教育的戰略目標，所以關於今年主題「療癒地球一生態與科技的轉換行動」，著重在科技應用對生態應負的積極良性作為，我們期待透過嚴謹學程規劃，還有高度緊密的互動教育，期許這一學期，彼此共振出的智慧能量，足可穿透人類生活面相的全面反省、修正與具體改變，並啟動行動方案。

2019 年 9 月底，聯合國氣候高峰會議在紐約舉辦，智利前總統巴舍萊 (Michelle Bachelet) 提出警告「氣候危機是有史以來最大的人權威脅，任何國家、任何機構、任何決策者都不能袖手旁觀」，她提出五大原則來促進氣候行動，諸多警訊，顯示全球化氣候危機已經攀升到，全面人道威脅及人權危機的地步。我深信，大家的專業比我有更多充分的證據或經驗，來佐證以上所言非虛。今天的冬季研究班絕非只是紙上談兵的一場偶合巧遇，我們要有自信，自己早已是奮起的和平種子與愛地球尖兵，既可展現承擔問題的勇氣，並能領導突破困局的行動。



冬季學校是高等研究教育的一環，作為學術殿堂的火車頭，規模雖小，卻極具前瞻價值，與此同時，在佛陀的庇佑下，2019年12月弄曼基礎的沙彌學院的教養計畫已經收容有四百位多沙彌，正接受嚴謹傳統的僧院教育，也將會打下現代教育的基石，還有有機生態農業實驗計畫，提供先進無毒的有機農業及土壤改良技術，進入可初步營運模式，這些具體進度都是銜接本計畫的重要一環。

我們在緬甸教育計畫是全面展開的藍圖：仰光有研究所，勃固有大學預定地，弄曼則是從出世到入世、從小學到專科的帶狀教育，這一整合性的全人教育計畫，所指向的地球共生共榮的願景，非常明確可期，不僅是對緬甸這個堅持佛陀千年傳承的古國，如何面對現代化衝擊，提供借鑑，其次，對於當今主導全球發展卻又陷生態於危機的科技物質文明主流，將振臂提出有力的建言，若能藉此培養出有深刻共識的和平種子，扭轉科技應用於生態療癒，甚至預防在先，兼容東方儒釋道的靈性修持與入世悲憫，實乃地球生態永續共生的福音，也是人類文明進階的希望所寄。

我確認，我們的專業團隊，都有共此一心的覺醒，而且有愈來愈多的護持者，比我更有能力看到機遇所在。美言不如一諾，我在此再次懇切邀約大家，不拘何時何地，不拘各種形式，參與並分享此一愛地球、愛和平的療癒行動，從人類教育植入智慧與慈悲的基因，徹底翻轉地球生命共同體的命運。

靈鷲山佛教教團創辦人  
釋心道



## ■ Michael von Brück 教授

來自世界各地 12,000 多名科學家，在《生物科學》雜誌上發表了有關全球暖化和氣候變遷的嚴厲警告。他們確定了六個必須立刻進行改變的關鍵領域，以避免即將發生之災難的最嚴重影響：能源、有毒物質、自然保護、糧食生產、消費、及經濟與人口增長。越來越多的科學家成為激進主義者，從來自德國、奧地利和瑞士的 26000 多名科學家，在 2019 年 3 月發佈的一項有紀錄的呼籲中可以得到證明。自稱為“未來科學家”，他們訴求的標題意義重大：“示威青年的擔憂有道理”。他們果斷宣布支持那些投入年輕一代發起的“星期五給未來”運動的積極分子。他們認為，當今政府提出的所有行動尚不足以改變潮流的趨勢。僅舉一個例子：儘管在巴黎氣候大會上做出了減少甚至停止化石能源生產的承諾和努力，但二氧化碳的排放仍在全球增長。

所有提到的六大領域都是相互關聯的。這本身就是一個明確的指標，表示我們必須克服區別式的分析和解決問題的策略。相反的，我們必須實施系統化的做法。許多大學都做到了這一點，生態計劃正蓬勃發展，大公司也已經接受了挑戰。這是充滿希望的好信號，但還遠遠不夠。

無需再重複工業生產、消費方式、以及我們的生活方式對地球造成嚴重破壞的數據。生態學已進行了廣泛的研究，知道的已足夠，某些知識也已建立。因此，成千上萬的科學家呼籲，對可應用的知識和可行的方案進行更多的研究努力。不過，似乎專注收集破壞數據也是一種避免災難的策略，這是避免面對生活必須改變的一種方式。

我們的社會正經歷根本的轉變。原因之一是新的工業革命 – 自動化人工智能技術、大數據、新的通信網絡、生物工程等領域僅是其中少數。另一個原因是生態危機。生態平衡受到破壞的威脅，因素錯綜複雜，一旦全球溫度升高 2 到 3 度或更高，則將無法預測未來事態的發展。地球上眾多人口居住地區可能被洪水淹沒，後果是巨大的移民潮，然後造成全面性戰爭和前所未有的痛苦。這只是其中一方面。

另一方面是生物多樣性的喪失。在此，我們需要改變農業方法，不僅是禁止使用農藥，還要採用非常不一樣的土地使用系統。我們需要停止對海洋的污染，不僅是因為污染破壞了大氣層或土地，而是土地會變成荒地，水也變成酸性的液體。



有一個我們經常沒有意識到的問題，那就是生物基本知識的遺失。大多數將來將成為經濟政治精英或決策者的年輕人，在都市環境中長大，沒有物種的知識，包括從植物和昆蟲到鳥類和哺乳動物。學校的安排各有不同，忙於教授分子生物學最複雜的部份，卻沒有注意這顯而易見的事情。因此，如果一個物種正在消失死亡，沒人會注意到，只因為我們沒有學會看到或欣賞到生命的豐富性，直到為時已晚，整個生物系統崩潰。儘管有各國政府的研究和口頭上的服務，但在日益全球化的經濟中，缺乏生態知識是造成大量錯誤估算和災難性發展的主要原因之一。農業系統生產、貿易和消費導致更大規模生產線的投資，將產品標準化、需要人工肥料，卻因此在世界上較貧窮的地區造成貧困，且對未來生存至關重要的生物多樣性造成破壞。

我們可以繼續，但是我們知道可以不必如此。迫切需要採取行動。有些人有行動，但大多數人和政府只是在說，而沒有行動。為什麼？

原因可能與以下事實有關：人類迄今為止的歷史經驗是，當居住的地方變得惡劣時，人們會遷移到其他地方。這是游牧民族的命運，當然，即使某個地方曾經淹水、乾旱或其他情況，農業還是可以重新開始。

選擇權已經消失，整個地球被住滿，再也沒有未知或空白的空間。我們意識到了生命必需的資源的有限性。空間有限，時間也是。我們沒有時間等待即將到來的天堂或黃金時代的歸來，那是宗教的期望或意識形態的目標。人類在科技發展中取得了巨大成就，但由於未能發展我們的意識、情感和對無意識力量的控制，我們的發展成果又倒退回依賴我們自己，並有可能毀滅我們。我們的發展是單方面的，在精神領域，我們仍然生活在無知的叢林中、感覺混亂、行為模式不可取。

因此，我們現在的緊急責任是將意識的演進發展掌握在手中，取得比現有更加適用的東西。這是精神發展的艱鉅任務，但原則上我們知道方向在哪裡。我們確實有工具，只是我們還不知道如何使用它們。轉換是必要的，而且是可能的。

在我看來，這方面有兩個前提條件必需先考慮：勇氣和自制，而我們兩者都需要。這些態度是精神發展的核心。勇氣需要冒險，通常會與主流背道而馳，拋棄舊的思維模式。勇氣是一種分手，向新的機會邁進。自制則可能是明智的自我限制。自制是一種對“必要性”的洞察力，有可能為生活品質帶來巨大的好處。



這是從量到質的轉變，因為它使我們精神能夠集中，享受生活所有領域中的每一件事、每個微小的瞬間，享受最專注的感官體驗，讓語言保持謹慎，讓行動做到準確。

轉型是必要的，而且是可能的。它會影響生活中的各個領域：科技、經濟、政治，還有更重要的，我們建立思考方式、感覺和行動的心智設定，換言之，就是根據對等互惠或對事物系統性的認知，產生對世界的綜合性看法和生活方式。只有發展更好的科技和更好的意識，我們才能成功。

更好的科技，表示我們理解所有事物是相互依賴的，並以此事實架構機械系統，更好的意識，表示理性與情感結合的心智，理解整體性，達到某種程度之正念專注的滿足感，視質量重於數量。

訓練心智是可能的。讓我們投入其中，用這樣的方式發展科學和技術，也就是不破壞自然是增強自然，這是可能的。讓我們投入其中，關鍵是一種考慮到雙方面的教育。這正是生命和平大學想要實現的目標，也是整個冬季學校的目的。讓我們以勇氣、自制、喜悅和勤奮開始工作。

# 課程主旨與大綱



## ■ 大綱

- A ) 心理與情感層面
- B ) 溝通過程
- C ) 社會與經濟層面

### 1. 動機

生態的轉型無法僅依賴科技的進步，同時還需改變科學、科技、管理、教育等領域的治理方式。需要深化個人和機構所有領域行動的知識來改變人類的行為。但是，不同的研究發現，單方面的知識並不能提供足夠的動力來改變人類的行為。相反的，已經確定有四個因素在這方面起到關鍵作用，因此，從事任何生態工作：

- (1) 必須創造喜悅感和滿足感
- (2) 必須合理
- (3) 必須能增強相關人員的自信心和意義感
- (4) 必須獲得超越個人視野的更高目標

### 2. 目的

2020 年冬季學校一方面從心理和情感動機開始，另一方面注入社會和經濟激勵措施，再加上對個人、公司和政府的行動策略皆具有巨大影響的媒體作為中間調節媒介。投資、資金流動、對主導經濟激勵措施、生產有深遠影響的決策、消費過程，政府法規和稅收制度為如何做出理性選擇的制定了框架。想在本地和全球範圍內改變這些系統，必須滿足上述 4 個因素才有可能。因此，為了學生和教授們能有創造性學習體驗而設計的計畫，學生不得不問哪些改變可以在本地和全球實施，以便使得這四個因素可以獲得適當的處理。

### 3. 當地合作夥伴

- 仰光大學
- 仰光巴利大學
- 緬甸蘭皮國家海洋公園（義大利米蘭奧科斯研究所）

## 4. 參與人員

教授：

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Elisa Facchini 女士	緬甸蘭皮海洋公園專案計劃經理
Nay Htun 教授	前聯合國開發計劃署助理秘書長、緬甸 GGG 組織創辦人
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Tammy Turner 女士	台灣樸門永續設計學會成員
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Khin Khin Soe 教授	緬甸仰光大學地理系教授
Larry Wong 博士	緬甸許多機構的高級顧問

## 5. 課程架構

2020 年冬季學校以 2019 年冬季學校的經驗和意見回饋為基礎，將討論主題朝更詳細的方向發展。重點關注於生態轉型的三個面向：

- (1) 在地和全球層面之決策制定的心理與情感因素
- (2) 新的溝通策略
- (3) 改變行為的激勵措施 – 社會和經濟獎勵制度



所有這些面向，將由國際專家整合處理，把他們的發現和建議與 4 到 5 個專題研究小組進行跨學科整合，從而為生態轉化提出具體的解決方案建議。冬季學校的前面幾天，老師、顧問和學生將共同合作決定專題研究小組的主題和策略。

### 專題討論架構

- 各組代表人介紹專題（每組 5-10 分鐘）
- 隨後進行辯證式的討論（20 分鐘）
- 開放討論（全體綜合討論），邀請學生提出意見和建議，導向與各專題研究小組主題有關的問題和建議（40 分鐘）。

### 論文報告

接受我們邀請的學生同意在冬季學校結束後的要求時間內完成一篇學術論文。在此基礎上，他們將獲得由德國慕尼黑大學人類科學中心頒發的證書。

## 6. 四 / 五個專題專題研究小組

各專題研究小組的主題，要能夠將跨學科教學或討論的內容，與緬甸、巴西（或其他地方）的當地狀況作連結。根據 Larry Wong 博士和其他人在仰光找到的合作夥伴（上文第 3 點），專題研究小組的工作設計應與當地夥伴緊密聯繫，一方面考慮當地的機會與需求，另一方面是國際教師、顧問和學生的專業知識，令兩者能夠緊密結合。

在整個研討會期間，教授和顧問將與學生一起進行專題研究。

### 1 月 13 日，專題研究小組組成會議：

- (1) 專題研究小組成立特別會議。在專題報告中進行充分討論之後，某些主題和領域會出現成為轉換行動的關鍵，學生應在會議中加以識別。
- (2) 將建議寫在黑板上，並選擇最有趣的。
- (3) 學生需決定加入哪個小組。
- (4) 要求教師和顧問參加他們最感興趣的小組。



## 7. 課程大綱

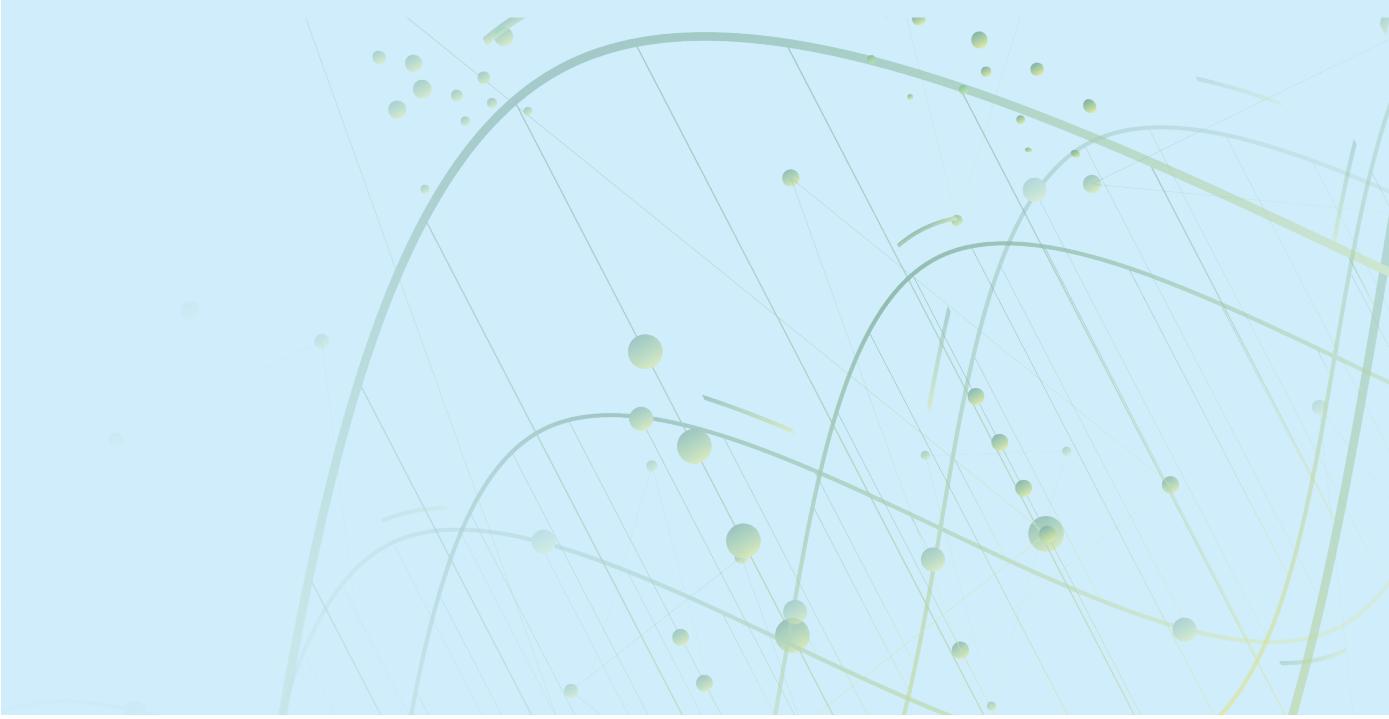
1 月 7 日	教授、顧問和學生抵達
1 月 8 日	上午：開幕式 下午：破冰會議，提綱，期望等
	專題演講：Nay Htun 教授
	環境與自然資源衝突的根本原因與誘因
	討論
1 月 9 日至 10 日	來自不同學科的教授進行介紹與討論
	虛擬專題研究小組
1 月 11 日	緬甸生態形勢講授與介紹
	上午：
	專題演講 Elisa Faccini
	蘭皮海洋國家公園計畫
	下午：
	1. 靈鷲山恆明法師：緬甸弄曼農場與教育現況介紹
	2. 變革性的生態行動領導力 – 緬甸的法律和行政機會
	3. Khin Khin Soe 教授：緬甸的農村和都市發展
	4. Myint Thu Myaing 教授：有關環境保護的國家和國際法
1 月 12 日	參觀仰光附近的生態計畫（竹計畫）
1 月 13 日至 15 日	專題簡介和專題研究小組討論
1 月 16 日	專題研究小組討論和仰光市區遊
1 月 17 日	成果發表 / 最終討論
1 月 18 日	閉幕式

## 8. 其他安排項目：

- 早上瑜珈 (MvB) 和晚上禪修 (心道法師)
- 每節課以 5 分鐘靜心練習開始
- 1 月 16 日的特別午餐
- 1 月 13 日晚參禮大金塔 (心道法師帶領)



# 教授與顧問之簡歷 和 報告摘要





## 邁克爾 · 馮 · 布魯克教授 (Michael von Brück)

德國慕尼黑大學人類科學中心成員

邁可 · 馮 · 布魯克神學博士是德國慕尼黑大學宗教系榮譽退休教授、宗教研究跨學科計劃的創始人和負責人；也是慕尼黑佛教研究中心（國際博士學位課程）的創始成員。他在羅斯托克大學（Rostock University）學習了神學，印度學和比較語言學，在印度的馬德拉斯大學（Madras University）學習了印度哲學和宗教。專攻不二論和大乘佛教。此外，還在馬德拉斯的克里希那馬查瑜伽中心接受了四年的瑜伽訓練，並在日本京都的天龍寺學習了臨濟宗的理論和實修。

1980-1985 年在馬德拉斯的古魯爾路德學院擔任客座教授之後，於 1988 年成為雷根斯堡大學的比較宗教學教授，並於 1991 年接任慕尼黑大學的宗教研究主席，並擔任該研究所所長。他在世界各地進行演講，並曾擔任各國許多大學的客座教授：德國漢堡、蒂賓根州，美國夏威夷大學、加利福尼亞大學戴維斯分校、萊斯大學，哈佛大學世界宗教研究中心，亞洲的印度馬德拉斯大學、班加羅爾大學、泰國清邁大學。八年來，他一直擔任《宗教對話》雜誌的總編輯。他是慕尼黑大學人類科學中心的成員，也是慕尼黑大學佛教研究中心的聯合創始人和成員。他一直是歌德學院科學顧問委員會的成員，也是蘇爾坎普出版社世界宗教顧問委員會的成員。

他是德國韋亞恩 / 慕尼黑緩和治療 - 靈性學院的創始主任。自 2015 年以來，他是奧地利林茨天主教私立大學宗教研究 / 宗教美學的名譽教授。他是仰光和台北生命和平大學籌備辦公室學術發展負責人。

他在世界各地的期刊上撰寫了二十多本主要書籍和約 300 篇論文，內容涉及神學、佛教、印度教和遇見世界宗教（尤其是佛教和印度教）。

馮 · 布魯克博士代表了一個認識論概念，他將其描述為嚴格的相對主義，用以區別”關係論” 與”相對論” 之間衝突。沒有任何事情本身是現實的，只有通過與其他事物的聯繫才能實現。他批評將主客體分離的思考，認為現實的發生是通過觀察而產生，所以，自然科學與精神科學之間的經典區別不再成立。



## ■ 專題報告摘要

### 動機與變革 - 勇氣與洞察力：社會心理面向和溝通過程

面對生態危機，我們要有應對緊急狀況的警覺性，及可能會發生災害的恐懼感，但另一個積極的看法是，這提供了我們改變生活方式的機會。就如同如何面對陌生人的老問題：有恐懼也有好奇。各個文化的歷史提供了有力的例子，根本的改變如何是可能的，以及如何跟為何必要的改變會失敗。我們需要借用歷史和認知科學的經驗，包括心理學以及禪修改變認知和情緒的眾多研究結果，以便制定適當的計劃來面對有關生態危機時應有的行為改變，增強我們的能力，採取新的思維模式與行動。

此外，為了發展創造力和新的改變的動機，需要適當的認識禪修教育及其藝術。我們將討論一些範例。對於勇氣的呼籲，則必須是在全球研究和風險管理的背景下解釋，也就是說，必須討論如何區分風險和勇氣的合理性。從社會和經濟面，適當的風險管理對生態變化至關重要。為了激勵勇氣的動力，有必要採用新的更緊密的溝通方式，以創造新的社會連結體驗，而我們必須找到機會來組織安排。因此，教育制度的改革似乎很重要。我們需要詢問哪些因素會在這方面提供機會，哪些因素會阻礙改變的動力。



## 塔德 · 卡爾達斯博士 ( Tadeu Caldas )

德國 Ecotropic 顧問公司全球永續發展專家

塔德卡爾達斯在巴西和英國的大學及研究所研讀工程學。過去 40 年中，他一直在農業永續、土地利用、企業和公共永續性等領域工作。在此期間，他被政府、企業、非政府組織和國際發展機構聘為顧問，致力於為各大洲、各種氣候環境、約 60 個國家的永續發展計畫提供解決方案。他致力於為各種問題開發有效的解決方案，這使得他因此從事了各式各樣的專業活動。

他從花時間在巴西的亞馬遜地區生活，研究土著長期的土地使用策略，以便為區域發展政策提供資料；為沃爾瑪所規畫的到目前全球最大的”集團永續發展計畫”貢獻專業知識；在 DEG ( 德國國際開發銀行 ) 和 B & M Gates 比爾蓋茲基金會的資助下，為泛非計劃開發創新的生態農藥減少措施，使 12 個非洲國家的近 100 萬小農受益。在評估了大型的食品和生物燃料跨國公司 BUNGE 的全球永續性和氣候足跡之後，就其緩解方案提供建議；協調德國政府贊助減緩氣候變遷的計劃，旨在減少科隆市 ( 現住所 ) 和里約熱內盧市 ( 其出生地 ) 公營公司的碳排放；協調阿曼沙漠的農業使用鹽水的開創性突破研究；在中國長期工作，支持北京全部區域的無化學、健康高產能果園的管理和輸入發展，保護都市的地下水供應；還有其他更多有趣且有效的計劃。

作為有機農業、食品和紡織品領域的領先專家和開拓者，他從事許多工作，曾幫助全球客戶生產安全且公平的食品、健康且生物多樣化的景觀、減少氣候影響並創造永續的碳匯，數以數百萬噸計的二氧化碳。在過去 40 年中，有機行業在全球取得了驚人的增長，對他來說是非常好的回報，同時也清楚表示，夢想是值得的，勇敢嘗試不可能。

關於仰光冬季學校，他想為緬甸貢獻如何做到積極、永續和生態行動的具體步驟。作為對地方治理的貢獻，他想評論和分析緬甸實施《永續發展計畫》的需求，從不同利益相關者的角度，從個人、企業和公共等層面。該方案值得支持，這由國家參贊翁山蘇姬女士所推動的。

卡爾達斯熟悉緬甸的氣候，社會經濟和環境挑戰，他在此地區內許多國家（例如孟加拉，中國，印度，泰國，越南等）工作過。



## 專題報告摘要

### 資助農業和林業的生態發展

### 可用資金來源和永續發展計畫準則

### 來自世界各地的具體案例研究

- 世界正面臨著無數的問題：農村、都市和工業區二氧化碳排放量的持續增長，隨之而來的極端且致命的天氣事件和氣候變遷；森林砍伐，野生生物和生物多樣性的急劇減少，導致物種大規模滅絕，其中有許多物種對生態平衡至關重要；有毒農藥對糧食和環境的污染，可溶性肥料對水體的污染；農業過度地、非永續地使用水資源；土壤、水體和海洋中的塑料污染；社會領域方面，在這個富足充裕的世界裡，卻有持續的飢荒、不平等和社會經濟困難。所有這些因素導致當前各大洲的大動員、社會動盪和抗議活動。
- 幾十年來，已確定由於單方面的經濟範式產生種種問題，這種經濟範式為企業家和股東帶來了可觀的利潤，但另一方面卻產生了非永續的價值，破壞了全球自然生態系統和社區的平衡結構。
- 過去二十年中，許多有遠見的個人、企業家、政治人物和公司領導人開始意識到，世界要運作永續發展的唯一方法，不僅是只有經濟目標，還要將與社會和環境福祉結合納入到倡議、計畫和商業策略之中。
- 這不僅適用於小農場，也適用於產出數千億美元收入的公司負責人以及負責大規模主權基金的金融家。
- 在世界上 100 個最大的經濟體中，有 71 家是集團公司，許多已成為負責任的公民榜樣，將公司的永續發展納入所有經營的領域，並產生了比世界上大多數慈善機構、多邊發展機構和政府全部加起來，還要更大的影響力。
- 負責任的大都市政治領導人也意識到，他們擁有為全球的積極變化做出貢獻的能力。C40 都市氣候領導聯盟一直努力在共同減少二氧化碳排放量和氣候足跡，數以百萬噸計的二氧化碳，現在匯集了 90 個世界上最大的都市，代表了 7 億人民。他們不等待中央政府採取行動。



- 個人和消費者也意識到了他們擁有“良善的購買能力”。有意識的消費者已經通過購買力，將數十億美元的價值，轉移到了全球的永續發展倡議中。出於對農業、林業和漁業永續發展計劃和產品進行認證的需要，各式各樣的生態識別標籤已被確認出來。尊重環境的計劃和產品、支付在價值鏈上工作的所有人的合理的工資和勞動報酬。
- 最後但並非最不重要的一點是，金融界也緊隨其後，開發了針對道德、環境和治理計畫的金融工具，使得幾十年前無法夢想能獲得資金和投資的舉措得以實現。我們將探索這些支持計畫的資源。
- 我將在小組討論中（以及後續討論中）探討永續發展的必要條件，並從我在全球曾經貢獻過的成功的生態農業中舉出具體案例。
- 在能源、交通和社會層面的第二小組中，我將分享永續發展市政舉措的例子，尤其是德國的智能聯運，將人類與地球帶到最前方。
- 緬甸已進入飛躍到永續發展的成熟時機，可將許多問題的舊模式拋棄於後。
- 我們比以往任何時候都更需要遠見、勇氣、智慧和領導才能，通過永續發展舉措，創造永續發展價值。
- 很高興為心道法師和邁克爾·馮·布魯克教授發起的這一有遠見的倡議做出貢獻。



## 彼得·愛德華教授（Peter Edwards）

瑞士自然科學院永續發展研究計畫主席

彼得愛德華 1970 年畢業於劍橋大學植物學系。1973 年獲得劍橋大學的博士學位，論文題目是“新幾內亞山地森林中的營養循環”。1973 年至 1993 年，擔任英格蘭南安普敦大學的生態學講師 / 資深講師。是瑞士蘇黎世聯邦理工學院（ETH）的植物生態學名譽教授，自 1993 年以來一直在此工作。2013 年到 2017 年，擔任新加坡 - ETH 中心主任。

他有大約 350 篇科學論文被引用，並且是多本書的作者 / 編輯，這些書涵蓋了廣泛的環境領域，包括生態系統過程、昆蟲與植物的相互作用、環境管理和生物多樣性。他最近的研究特別關注陸地生態系統的大規模過程，包括大型草食動物與植被之間的相互作用、大河洪氾區的植被動態、生物入侵、以及生物多樣性在農業景觀中的角色。

彼得愛德華對於運用科學和技術進行更好的管理有濃厚興趣。在英格蘭南安普敦期間，他是地理數據研究機構的負責人，該簽約機構提供環境研究和諮詢工作。他也是生態與環境管理協會的創始人兼第一任秘書長，這是一家英國的環境科學家專業組織。在 ETH，他是全球永續發展聯盟的教師協調員和執行委員會成員，該聯盟是幾個領先大學之間的研究團隊。



除了研究和教學，彼得·愛德華曾在 ETH 和其他地方擔任過許多行政職務。其中包括 ETH 的研究委員會的成員、環境科學系（2000-2002 年）和環境系統系的主管（2010-2013 年）。他曾擔任英國生態學會計劃秘書長，國際生態學會 INTECOL 理事會成員以及瑞士植物學會主席。自 1997 年以來，他一直是植物生態、進化論與系統學等觀點雜誌的編輯。他目前是瑞士自然科學院永續發展研究計畫的主席。

他是 ETH 未來都市實驗室“都市景觀生態系統服務”計畫和“新加坡製冷”計畫的首席研究員。同時也是新加坡南洋理工大學亞洲環境學院的兼任教授。2016 年，他在新加坡發起科學、科技和政策研討會，新加坡 - 麻省理工學院研究與科技聯盟及新加坡國立大學共同合作。他帶領研究團隊，尋找如何在都市環境中，最大限度地提高生態系統效益的方法，以及減輕熱帶地區都市熱島效應的方法，以使都市更具復原力和宜居性。



## ■ 專題報告摘要

### 如何將生態理論轉化為應用藝術？經驗與策略

“世界有問題，大學有學科。”人類活動引起的環境問題正在加劇，生物多樣性正在以前所未有的速度消失，土壤受到不可逆轉的破壞，淡水日益短缺，氣候正在變遷。為了扭轉、甚至減少這些趨勢，人類與自然環境之間的關係需要有本質性的改變。如何在最多幾十年之內實現這一目標尚不得而知，但很顯然的，學術界必發揮關鍵作用。為了做到這一點，學術機構需要在幫助社會走向永續發展方面變得更有效率（Kueffer 等，2012）。

在我的演講中，將簡要討論一些阻礙了學術知識應用到做出更好決策的障礙。第一個障礙是複雜性，現實世界的問題很少能通過一門學術學科的見解來解決。例如，生態學理論可以為任何環境問題提供有用的見解，但這些問題的根源往往是社會、經濟或科技性質。第二個障礙，有時也稱為顯著性挑戰，是指以可用的形式呈現科學知識。很多時候，與某些特定決策有高度相關的訊息，或者是拿不到，或者是其重要性不明顯，因此未被使用。第三個障礙是合法性，這意味著知識的產生方式必須讓使用者看到“尊重利益相關者不同的價值觀和信念，行為公正，以公平態度對待相反的意見或利害關係”（Clark et al。, 2016）。最大的挑戰是，當問題本身的訊息就不確定，不同利益相關者又有強烈不同的利益差異或價值體系。這是許多永續發展問題的典型狀況，在這種情況下，可能無法清楚區分事實產生的過程，以及為支持某種特定決策而產生的詮釋過程。

## ■ 專題報告摘要

### 生物多樣性。如何協調生物性命與經濟利益？

我將以都市地區的綠色空間和野生動植物為例，考慮如何協調生物多樣性和經濟利益。“生態系統服務”的概念，是指人們從有效的生態系統中獲益，包括都市內的綠色區域。這些利益非常多樣，但通常分為四種主要類型：供應、規範、社會文化和支持生態系統服務。第一個提供生態系統服務，是指生產可採收的產品，例如糧食、建築材料和燃料。第二是規範生態系統服務，這有助於將環境條件保持在安全或舒適的範圍內。植被可以對都市的小氣候產生很大的影響，有助於緩解都市的熱島效應。同樣的，暫時保留雨水、植被和未密封的土地，可以預防大雨後發生淹水。第三類社會文化生態系統服務，這是指此服務對於人類的心理健康和文化的重要性。樹木和花園增加了都市景觀的舒適便利度和吸引力，幾乎所有的綠地都具有休閒的潛力。作為人們聚會、休息和遊玩的地方，公共綠地促進了社會和文化的融合，尤其是對兒童和年輕人。最後一個類別，即支持服務，是其他三個類別的基礎，有助於提高都市系統的整體復原力。關鍵的支持服務包括授粉和生物多樣性，授粉可幫助維持植物種群並生產糧食，而生物多樣性可增強生態系統提供服務的復原力。

考慮到土地開發的經濟壓力，期望都市綠地能保持到未來是不現實的，除非能證明其價值，特別是從財務角度來看。在價值的來源中，最可以被輕鬆衡量的是都市裡最重要的一項利益—舒適便利度，舒適便利度可以通過綠地和樹木對附近房地產價格產生的影響來評估（稱為“享樂價格法”）。

其他的好處與生態系統中的調節功能有關，例如冷卻，可以從節電的角度進行評估；例如減少淹水的風險、可以從管理暴風雨所需的結構成本方面進行評估。最後，條件評估法，讓研究人員可以通過詢問人們願意為綠色空間或都市生態系統支付多少費用，來評估其他的非市場性利益。這些取得生物多樣性價值的方法雖然離完美很遠，但它們通常為保護這些地區提供了令人印象深刻的支撐（Edwards, 2019年）。



## 艾麗莎 · 法基尼小姐 ( Elisa Facchini )

緬甸蘭皮海洋公園專案計劃經理

艾麗莎法基尼是一位國際發展專業人士，專注於環境和生物多樣性的保護。她擁有英國薩塞克斯大學的發展研究學士學位、倫敦帝國理工學院的環境技術碩士學位，以及環境經濟學和政策專業。

自 2016 年以來，她一直與 Istituto Oikos 合作緬甸計畫，Istituto Oikos 是意大利專注於生物多樣性保護和永續發展領域的非政府組織。她目前是緬甸蘭皮海洋國家公園 ( Lampi Marine National Park ) 保護計畫的專案經理。蘭皮海洋國家公園是緬甸唯一的海洋國家公園，保護 50 多種陸地和海洋瀕危物種，具有極其豐富的生物多樣性。2018 年，她參與了蘭皮海洋國家公園總體管理計畫的修訂和更新。Elisa 之前曾在尼泊爾從事農村發展計畫，並在意大利擔任非營利組織的計畫書撰寫人。



## ■ 專題報告摘要

### 蘭皮海洋國家公園：讓利益相關者參與保護區管理

Istituto Oikos 奧科斯研究所是一家自 2009 年以來在緬甸開展業務的意大利非政府組織，其宗旨是促進生物多樣性保護和負責任的自然資源管理。更具體地說，奧科斯與若開邦南部和坦尼達里地區（包括蘭皮海洋國家公園）的自然資源與環境保護部（MONREC）之森林部門合作。

課程期間，將進行簡短的演講，介紹奧科斯研究所在緬甸的計畫，特別重點介紹蘭皮海洋國家公園的保護活動。蘭皮海洋國家公園是緬甸唯一的海洋國家公園，保護著 50 多種陸地和海洋中、豐富多樣性又瀕危的物種。

然後指導一個工作坊，反映不同利益相關者在保護區和自然資源管理中的參與情況。首先，將介紹用於制定蘭皮海洋國家公園總體管理計劃的參與式做法，討論利益相關者參與的重要性，並找出常見的障礙。

然後，主持玩一種角色扮演的遊戲，模擬不同參與者參與決策的情況。每位參與者將被指派一個特定利益相關者角色，參加小組磋商，討論主持人提供的各種情境方案。討論結果將由評鑑團隊進行評估，找出一種能平衡不同的考量點的解決方案。

角色扮演遊戲結束後，將有一段簡報時間，回顧所學到的知識和挑戰，確認可令利益相關者參與保護區管理的建議。



## 奈敦 教授 (Nay Htun)

緬甸綠色經濟綠色增長協會創辦人，前聯合國開發計劃署助理秘書長

是緬甸仰光非營利組織 GEGG 綠色經濟綠色增長協會的創始人和名譽贊助人，在過去的十年中，主辦了多屆 GEGG 論壇，主題是綠色、永續發展、復原力、智能和包容性發展。 GEGG 還支持並主持東南亞國家協會（東協）綠色經濟研究所 AIGE，這是一個由東協國家元首 / 政府在 2014 年第 25 屆東協高峰會上認可的東協憲章實體。

他是倫敦大學帝國學院的院士，這是該大學因傑出成就而可授予的最高榮譽；紐約州立大學石溪分校材料科學與化學工程兼任教授、中國上海同濟大學名譽教授。

Nay Htun 博士目前關注的重點在於：環境和自然資源衝突、預防和解決衝突的傳統方法、和解與恢復。他認為，環境以及支持生命的體系，對於人類、對於靈長類是非常重要的，對於世界上其他的生命狀態也同樣重要，應該說這些因素之間是相互交織的。過去、現在和將來是相互聯繫的，現在發生的事情可能在下一秒鐘就變成了歷史。而且也會決定未來可能會發生什麼樣的事情，這些都是相互聯繫的。

他認為，我們所需要的三個變革：一、碳的變革，二、材料的革新，三、仿生學新材料的創新，這些創新是可以幫助我們來解決環保問題的。

相關學術聯繫單位包括：倫敦大學帝國學院化學工程博士、帝國大學環境政策中心訪問教授、泰國曼谷 Chulabhorn 研究所訪問教授和國際顧問、哈佛訪問學者、麻州塔夫茨大學弗萊徹國際法和外交學院訪問學者、加州大學爾灣分校校長特聘教授、瑞典隆德大學國際工業環境經濟學研究所亞太地區訪問教授和高級顧問、紐約州立大學石溪分校教授、大學協會 1990 年塔羅瓦宣言選出了創建者和環境專家、曼谷亞洲技術學院環境工程系教授兼副主任。



曾經擔任之工作與核心職責包括：聯合國環境署和開發署助理秘書長。巴黎環境署工業和環境辦公室高級計畫專員、曼谷亞太地區辦公室區域主任、肯亞內羅畢副執行主任。在開發計劃署任職期間，他是紐約亞太局助理局長兼區域主任，管理和監督了 24 個國家辦事處，指導了大型的多年區域方案，包括談判，主持和設立政府間湄公河委員會以及為之提供支持。圖們江地區發展方案；人權與發展；加強性別在發展中的作用；能源、環境與氣候變遷；發展與扶貧。

聯合國環發會議聯合國環境與發展會議（又稱 1992 年里約地球峰會）主任兼特別顧問；他還是工商業的聯絡人；協助並聯絡日內瓦世界永續發展工商理事會的建立。亞洲開發銀行特別顧問為在巴西里約熱內盧舉行的 RIO+20 高峰會，兩年期密集政府間籌備工作提供諮詢和參與。紐約州東漢普頓鎮永續能源委員會成員，與非營利組織的部分聯屬關係，包括紐約哥倫比亞大學國際氣候與社會研究所監督委員會成員、日本羽山市全球環境研究所董事會成員、韓國首爾國際疫苗研究所創始人和名譽受託人、法國巴黎國際科學聯盟理事會環境諮詢委員會成員、瑞典斯德哥爾摩環境研究所董事會成員、中國環境與發展國際合作高級理事會成員、東南亞夥伴關係都市氣候彈性國際顧問委員會成員，這是一項由多倫多大學和泰國環境研究所協調開展的合作研究和教育計劃、華盛頓特區 Screen Scope 顧問，非營利性獲獎環保紀錄片的製作人，例如 PBS 中顯示的《地球之旅》劇集、東京大學永續發展科學雜誌編輯、紐約長島培康尼克研究所所長、美國綠色建築委員會長島分會會員。

參與的私人部門分支機構有：美國米德蘭陶氏化學公司環境諮詢委員會成員、埃克森美孚的全資子公司 ESSO 泰國最大部門的部門經理。

### 榮譽獎項和殊榮有：

- 2014 年” 國際能源學會國際能源研究所華盛頓特區獎 “表彰其在發展中國家和新興國家提高能源效率，促進永續發展性和減少溫室氣體排放方面的傑出貢獻和指導。
- Chulabhorn 金牌
- 紐西蘭工程師學會紐漢講座演講人

### 出版物，主題演講：

- 120 餘篇作者 / 共同作者的論文，報告，報紙 / 期刊文章
- 在許多大型國際技術會議上的主題演講



## 1月8日專題演講

### 環境與自然資源衝突的根本原因和觸發誘因

在整個人類的文明歷史中，從最早到現在到將來，土地、河流、水、森林等環境和自然資源的狀況一直是衝突的根源、成因和觸發原因。不平等的基金捐贈、發展的利益、過度開發和濫用等等，造成並加劇了宗教、文化、種族、意識形態、社會和經濟方面的衝突。科技也是一個因素，而且越來越嚴重。火災是科技帶來好處和破壞的最佳例證。小心謹慎的使用帶來好處、粗心誤用則會造成無法估量的損失。

進入第 50 個年頭的網際網路 / 互聯網是另一個明顯的例子。我們仍未充分理解 iPhone 和社交媒體的巨大利益、不斷衍生的社會影響、與其相關的擔憂和衝突，特別是當 5G 可無限應用在所有人類活動的時候。

從歷史上看，對環境的擔憂和衝突出現在許多記載裡，例如公共衛生、職業衛生、空氣和水污染、土壤侵蝕和退化、森林砍伐等。水，特別是兩個或兩個以上國家共享的水和土地，已經造成並繼續引起許多衝突和戰爭。把遠古時代至今看成一個簡短的時間表，過去和現代的證據皆顯示，公平和包容地獲取自然資源，對於避免和預防衝突至關重要。

隨著 1972 年聯合國人類環境會議（通常被稱為斯德哥爾摩會議）的出現，“環境”這一詞在國際上的使用越來越多。該會議向聯合國大會建議設立聯合國環境規劃署 UNEP。會議指定 6 月 5 日為世界環境日。但“環境”一詞仍未達成普遍共識。斯德哥爾摩會議認為環境是“人類環境”，有三個支柱，即生態、社會和經濟領域。

我會簡要描述設立環境署所產生的廣泛影響，及其在《蒙特婁議定書》被通過之中所扮演的的關鍵角色。

為了強調環境問題和衝突的根源以及解決過程，本演講將藉用各國政府於 1987 年通過的《蒙特婁破壞臭氧層物質管制議定書》。這一具有里程碑意義的多邊環境協定，規範近 100 種人造化學品的生產和消費，稱為臭氧層破壞物質（ODS）。當釋放到大氣中時，這些化學物質會耗盡並破壞平流層的臭氧，該



薄薄的屏蔽層可保護人類和環境，免於受來自太陽的有害紫外線輻射所造成的傷害，此傷害會導致人類皮膚癌的發生率的提高，傷害許多生物的遺傳基因，造成生物系統、生態系統功能、和糧食鏈的損傷與破壞。該議定書是迄今為止所有 197 個聯合國會員國唯一批准的聯合國議定書。

將特別討論氯氟烴、CFC、ODS。 CFC 是 1930 年代開發的一系列化學化合物，安全無毒不易燃，是製冷、空調和噴霧罐推進劑等危險物質 -- 如氨氣 -- 的替代品。氟氯化碳也是一種溫室氣體，助長了氣候的變化。

演講將回顧科學的進展過程。“臭氧空洞”的發現，促進了科學研究、政府間的評估，並增加了公眾的認識與關注。在推動政府回應問題上，公共衛生起到至關重要的作用。氟氯化碳的生產已經根據《蒙特婁議定書》逐步淘汰，由氫氟碳化合物 (HFC) 等其他產品取代。預計到本世紀中葉，臭氧層將完全恢復。《蒙特婁議定書》提供了一個鼓舞人心的例子，說明國際間是能做到最大程度的合作。

最近，世界各地發生大規模示威和抗議，特別是青年人，要求對氣候變遷採取行動。演講將提出一些能減緩並適應氣候變遷、新出現的科技、經濟、金融、政策和立法措施。人類從蒙特婁議定書的過程所吸取的教訓是非常相關且意義重大的。

邁向綠色範式之基礎與轉型過渡期，必須先找出環境和自然資源破壞的根源和誘發的成因，否則將加劇衝突。為朝向全面整合的永續發展、復原力、包容性及公平的未來，快速過渡將是我們的當務之急。

### **特別備註：**

蒙特婁議定書中對 CFC-11、CFC-12、CFC-113、CFC-114、CFC-115 等五項氟氯碳化物及三項海龍的生產做了嚴格的管制規定，並規定各國有共同努力保護臭氧層的義務，凡是對臭氧層有不良影響的活動，各國均應採取適當防治措施，影響的層面涉及電子光學清洗劑、冷氣機、發泡劑、噴霧劑、滅火器……等等。各國還應當定期召開大會及報告淘汰消耗臭氧層物質的數量和進度，並以法規等手段促進代替 CFC 等物質的替代品和替代技術的研發。此外，議定書還要求各國考慮採用何種機制實現在技術援助方面的合作。



## ■ 1月 10 特別演講

### 加強與加速永續發展的支柱：經濟、社會、生態、能源、倫理 --- 當務之急：快速過渡以邁向轉型的綠色範式

該演講將概述經濟、社會、生態、能源和倫理的相互關係。將討論能源在人類發展、衝突、和平、安全、及對地球生命影響中的核心作用，特別是化石能源和碳。我們越來越需要快速過渡到一個乾淨、能源可再生和脫碳的未來。

將簡要回顧當前的科學知識和越來越多的經驗證據，顯示大氣、岩石圈、水圈、生物圈和冰凍圈之間相互作用與連結的生態系統。生態系統的重大改變正在影響“人類領域”中的社會、經濟、金融和政治。反之亦然，人類及其建築系統繼續改變著生態系統。

這些領域的“承載能力”和“外部極限”被超越，帶來了可怕的風險和後果，有些是不可逆轉的。這些變化的規模、速度及匯合在人類歷史上是前所未見的。

當代歷史從 1760 年製造和生產的工業革命開始，顯示所謂發展是一個模糊而靈活的術語，主要集中在經濟和金融上，社會和生態的後果往往被忽視或視為次要。我們將對過去 250 年發展的規模、速度、巨大的後果、及正在發生的空前轉變進行快速回顧。

從 1960 年代發展後期開始，生態後果開始越來越明顯。1962 年雷切爾·卡森 (Rachel Carson) 的《寂靜的春天》、1966 年芭芭拉沃德 (Barbara Ward) 的“太空飛船地球”、1972 年雷內·杜比 (Rene Dubious) 的“唯一的地球”、1928



年瑪格麗特·米德斯（Margaret Meads）的“薩摩亞時代的到來”、1964年“文化進化的連續性”，這都是一些開創性著作，激發並引起了大眾對地球狀況的覺醒和關注。導致了聯合國一系列重要會議中的第一個會議的召開，也就是1972年在瑞典斯德哥爾摩召開的關鍵性的聯合國人類環境大會。1993年聯合國大會設立了聯合國環境規劃署UNEP。

1992年歷史悠久的聯合國環境與發展會議（又稱里約地球峰會）明確闡述了涵蓋經濟、社會和生態的人類環境是促進永續發展的三大支柱，並於2012年聯合國永續發展大會上重申（又名RIO+20）。將重點介紹大會宣言和原則，其過程和主要成果，加上已學到的主要教訓。

儘管三個支柱（經濟、生態、社會）比一個支柱（經濟）或兩個支柱（經濟和生態）更具永續發展性、復原力、公平和包容性，但仍然不足，迫切需要建立第四個支柱“道德”。

一個具有遠見、大膽的、整體性的，結合了四個支柱、跨學科、跨部門和利益相關者的“轉型的綠色範式”正在形成，會有詳加闡述，強調需要採取何種行動來支持那些要用活力來執行的工作。



## 肯尼斯·普教授（Kenneth Pugh）

美國耶魯大學哈斯金斯實驗室主席兼研究主任

肯尼斯普是耶魯大學和康涅狄格大學附屬跨學科研究所哈斯金斯 Haskins 實驗室的主席兼研究主任，致力於研究語言的生物基礎。同時也是康涅狄格大學心理學系教授、耶魯大學語言學系副教授、以及耶魯大學醫學院放射診斷學系副教授。在過去二十年中，他的研究計劃採用遺傳整合、神經影像、和認知方法來解釋大腦的注意力、記憶力和認知力；並且特別關注兒童的典型和非典型語言閱讀發育。

他創立並指導哈斯金斯全球掃盲中心，這是一個國際性的跨學科合作組織，匯集了科學家、從業者、教育者、政策制定者和教育技術專家，其廣泛目標是跨語言、跨文化地改善兒童的語言和讀寫能力。該中心的重點在於更深入了解：早期的神經認知發展如何影響後期的教育成果，尤其是資源貧乏的兒童，在貧困的不利壓力下如何受到影響，壓力來源有許多包括營養問題、壓力和暴露在環境毒素中等等。該中心的目的是為出生到八歲的兒童設計一套更有效的干預措施，以降低風險並提高識字率和其他學習成果。

肯尼斯普的專業工作還包括擔任許多機構的國際諮詢，如聯合國教科文組織全球教育評估委員會共同主席、國際閱讀障礙協會的科學顧問委員會、巴黎國際誦讀困難症科學諮詢小組、匹茲堡大學學習研究與發展中心客座委員會、紐約兒童心理研究所科學諮詢委員會。他也曾是美國國家衛生研究院（NIH）語言和交流研究部門成員、及國家科學院的研究委員會“學習科學委員會：青少年和成人掃盲的基礎和應用”成員。2017年，肯尼斯普榮獲美國國家兒童健康與人類發展理事會獎項中的“美國國家衛生研究院（NIH）優異獎”。該獎項表彰在 NIH 的持續資助下，得獎人對科學所做出的傑出貢獻。2019年5月，肯尼斯普獲得芬蘭於韋斯屈萊大學的心理學榮譽博士學位。

修行 / 沉思背景：肯尼斯普在16歲時就開始了七年的耆那教僧侶訓練（在美國和印度都生活過）。早期沉思於禪修實踐和耆那教哲學（非暴力、倫理、邏輯和認識論），塑造了他後來研究大腦和思想的方法。



## ■ 專題報告摘要

### 如何將生態學理論轉化為應用藝術？經驗和策略

在執行道德、尊重環境和永續發展政策的所有障礙中，經濟和政治因素是的最大障礙，從多方面破壞進程，本屆冬季學校的一些參與者將詳細討論這些因素。在我的發言中，我打算將更多的重點放在學習者身上。具體來說，正規（與非正規）教育方法如何能：1) 加強理解各種與生態政策和計畫有關的風險和效益，2) 使學習者對環境科學及相關領域的核心原則有更深入的了解。

聯合國教科文組織正進行全球教育評估，根據最近身為其共同主席的經驗，我將提供一些最新的、創新的環保教育模式，這些模式正出現在許多不同文化當中。這些模式傾向於將個人放置於更大的生態環境中，為學習者提供科學資料中有關全球氣候潛在危機的關鍵訊息，以及環境因素對個人的影響（包括高風險環境對嬰兒和兒童的神經認知發育的影響）以及創新的永續發展政策如何能令全球脆弱的人類因此受益。



## ■ 專題報告摘要

### 動機與改變 - 勇氣與洞察力： 社會心理面向和溝通過程

我們生活在一個對於理解認知、思想和行動等神經認知基礎有著快速發展的時代，以及這些心理過程如何使人理解周圍的世界（及自己在其中的位置）。這種對人類心智的理解，得益於兩個通常不相關的專業架構：1) 在神經科學廣泛的範疇裡，對於認知發展中的關鍵點：基因 - 腦 - 環境，有迅速擴大的理解；2) 重新發現較為古老的精神、道德和靈性上的冥想練習，可以轉變思維和動機，增加靈活度、創造力和解決問題的能力。

傳統的生物醫學研究傾向於提出以下問題：“大腦如何引起思考，為什麼發生破壞性神經系統疾病？”相反地，沉思 / 禪修學科則提出非常不同的問題：“如果我們更清楚地知道如何以符合道德的方式利用大腦的巨大能力，那麼大腦 / 思想就起作用了。”兩種方法都能產生有價值的訊息，這些訊息可以幫助我們提高認知能力和創造力。而這些技能反過來對於幫助個人既能適應不斷變化的世界，又能產生創新的改善方法至關重要。在我的演講中，將重點說明我的獨特承諾（以及一些挑戰），如何將古老的和現代的觀點結合在一起，以幫助、改善準備好應對全球挑戰。



## 伊娃 · 魯瑙教授 (Eva Ruhnaу)

德國慕尼黑大學人類科學中心主任

在德國和加拿大研讀物理學、數學和哲學。從慕尼黑科技大學獲得數學博士學位。她曾在加拿大埃德蒙頓大學、慕尼黑、耶拿、漢堡和柏林等大學任教。並在加拿大埃德蒙頓大學數學系、慕尼黑馬克斯 - 普朗克物理研究所、慕尼黑大學醫學心理學研究所、美國普林斯頓高級研究所、美國拉荷亞的神經科學研究所、尤利希研究中心、和日本東京國立科學技術政策研究所等各機構擔任研究員。

自 1997 年以來，擔任慕尼黑大學人類科學中心的科學主任。2016/17 年，兼任柏林洪堡大學的客座教授。她在微分幾何、物理學與哲學中的時間概念與其數學模式、量子學理論、和神經科學領域等從事工作及著作，先後共發表了大約 50 篇論文和 4 本書。



## 專題報告摘要

### 善治和倫理道德： 社會心理層面和溝通過程 – 行為的改變

人類科學中心重視“普遍性的人類學和文化特徵之間的互補性”，什麼單位、是什麼將人類分開。以此標題為思考，建議在溝通過程中考慮以下六個陷阱：

#### 1. 偏見

每種觀點，無論是專家還是普通人，都不可避免地是基於偏見（前提），換言之“假設”是世界觀的基石。偏見的檢測並不容易，因為偏見是人類感知和行動的必要條件。

#### 2. 外部觀點

拒絕將固有的“前提”主題化的態度，經常導致固化的外部觀點。聚焦解決技術和物質問題時，往往會低估或壓制政治、社會和人的問題。

#### 3. 極端的思考與爭論

在討論和解決問題的情境中，特殊情況和差異往往會被忽略，比喻來說，沒有顏色，只有黑白。

#### 4. 真相

在爭論中，真理只有一個的想法很普遍。這是樸素實在主義的世界觀，不受感知對象的影響，但受到古典科學思想的影響。另一方面，有一種說法，所謂的相對性世界，與感知對象的結構有必然不可缺少的關連。因此，應該考慮真相與準確性（在世界觀點內）間的區別。

#### 5. 反思與決定

拒絕將固有的“前提”主題化的態度也將導致缺乏反思。對於人類來說，我們的特徵是我們有能力使許多動作可以基於反思，而不僅基於（條件）反射。感知和行動之間可能存在差距。對於可能採取的措施，我們可能有幾種選擇，有一種“介於兩者之間”的時間。每一個要採取哪種行動的真正決定，都包含後果的不確定性。為了減少或避免這種不確定性，我們產生了巨大的訊息氾濫，



希望能夠將我們的決定推論為可證明的和必要的。這似乎是全球性的嘗試，想重新獲得反射的天堂。

## 6. 目標與優化

持續增加的複雜性使得現代世界的人很勞累。因此，有必要設定標準，按照過去已經成功並定義為正常的。例如，在經典物理學中，推動通過生物學（和醫學）的常態性是由優化決定。這些標準更易於在全球使用和遵循。同樣，在很大程度上避免了對這些規範的背景概念的爭論。

為了實現更好的溝通和良好的管理，以下三個說明可能會有所幫助：

### A) 學術上的嚴謹

練習六個陷阱的反思，有能力理解、重複和忍受爭議立場時的緊張。

### B) 行動的藝術

現代人強調可行性，知識的過度生產則導致靜態文物（事物）和訊息碎片的過度生產，威脅到我們的行動能力。我們有採取類似行動以避免這種困難的危險。動態人工製品可以微妙的方式標準化了我們人類的行動能力。

### C) 發現“之間”

從人類行為學和社會學的角度來看，我們知道“我們”這個群體是由個人關係所定義的。在我們的全球化和個人化的世界中，許多問題的解決方案可能會在與臨時的相關性結構相遇時得到加強。在這種“介於兩者之間”的區域中，我們的人文能力有可能產生最好發展和運用。

考慮到這些因素，我們也將討論現代科技的風險和機遇，尤其是人工智能的發展和應用。



## 唐敏女士 ( Tammy Turner)

台灣樸門永續設計學會

唐敏是樸門永續設計學會在台灣北部的規劃師與教育家，她在那裡住了 30 多年。樸門永續設計是一種注重整體生態的系統設計方法，旨在創造健康和可再生的環境。關懷地球、關懷人、公平分享（也稱為關懷未來）這三個道德準則是樸門永續設計的核心與實踐。樸門永續設計倫理和原則，為建立再生環境所涉及的思維過程提供訊息。她教導和協助樸門的設計過程，並領導建立以社區為主的樸門計劃。在台灣中部和香港較大地點的地方協助社區支持的農業計劃。她從 Robyn Francis, Geoff Lawton 和 Sepp Holzer (他們是澳大利亞和歐洲一些最受尊敬的樸門永續設計老師) 那裡接受了設計培訓。她還從土著長者那裡學到了傳統的森林園藝和資源管理做法與技能。她的專長是溫帶 / 亞熱帶 / 熱帶氣候下的樸門永續業總體規劃和設計，以社會和社區為中心的可食用景觀及農作、食用林業和農林業計劃。迄今為止，她領導了數十個以社區為主的樸門計劃，這些計劃主要在台灣北部和西部進行教育、培訓、參與式設計、和社區營造。她還曾做為主要講師在台灣、香港、中國大陸和印度任教或共同教授過二十多個樸門設計認證 (PDC) 課程。

在成為樸門永續設計者和教育者的歷程之前，她一直參與台灣的社會和環境運動。透過與丈夫共同擁有和運營的通訊科技服務公司 **Pristine Communications**，為台灣政府機構和在亞洲營運的跨國公司設計和管理大型國際多語通訊。她會中英雙語。



## ■ 專題報告摘要

### 如何將生態理論轉化為應用藝術？經驗與策略

我決定要精通並教授樸門永續設計的原因之一，是因為它的設計特別採用了生態學理論，同時將其應用到我們人類的居住地，也就是我們生活、生產糧食和製造東西的地方。而且由於大多數人都對糧食和健康、美學上令人愉悅的居住環境感興趣，學習和做事的機會得到極大的擴展，因此共同建立以社區為中心、合作管理以生態可食用景觀為特色的場所、使用被動式太陽能設計建造的環境，已經成為個人和社區實踐生態理論的地方。下一個挑戰是通過分佈式網絡和節點進行規模擴大，以支持和促進更大的交換與大型生態復原計畫。

## ■ 專題報告摘要

### 能源和交通的轉型 ——科技、改變中的基礎設施和社會影響

根據樸門永續設計之倫理和原則規劃的生物區域，強調對自然、社會和服務“流域”的深度分析，建立公平、對生態負責的策略，以用於發展和資源利用。希望成為碳中和的社區，必須根據與自然共存的模式進行設計。因此，房屋、糧食生產、教育、社會參與、和人口流動的設計，必須模仿生物和生態的系統。交通運輸，則以約束能源（碳），和有能力盡量滿足當地環境的需求為考慮，從而減少總體的出行距離和頻率。為了實現這樣的規劃安排，合作住宅和社區的設計將聚焦在當地的糧食生產、學校和商店，更大的自治管理和基礎設施設計，將促進特定範圍內資源的有效利用，例如鄰里、社區、城鎮、都市等等。



## ■ 專題報告摘要

### 生物多樣性。如何調和生物生命與經濟利益？

沒有生物或生物多樣性就不可能有經濟。整個生命網，從最小的微生物到最大的有機體（真菌）和哺乳動物，我們所依賴的生物服務，不僅是單一植物、樹木或動物，還依賴它們所屬於的生態和自然系統。目前全球經濟範式中的經濟利益，並沒有賦予這些不可缺少的生物服務價值，也無法評估其價值，因為只有當它們消失並轉化為商品，才會獲得價值，以至於乾淨的水、空氣和健康的土壤變得一天比一天珍貴。因此，解決的辦法必須是一種重申生命和生命系統之神聖性的方案。這就是為什麼作為樸門永續設計的從業者和設計師，我們的核心道德準則是“關懷地球”，“關懷人”和“公平共享”，如此，我們不僅保護環境，還要再生和恢復被損壞的景觀，透過增強能力、社區建設來關懷人們，並將我們從持續關懷地球、關懷人的努力當中所得的盈餘歸還給大眾。



## 曾志朗教授 (Ovid Tzeng)

台灣系統大學校長

曾志朗教授是台灣大學系統的校長，也是中央研究院的院士。曾任教育部長，政務委員和文化事務委員會部長。是認知神經科學和神經語言學的傑出研究者，也是學術機構經驗豐富的領導者。是美國哈斯金斯實驗室（Haskins Laboratories）的董事會成員，也是澳大利亞 ARC 認知與疾病卓越中心的顧問委員會成員。2010 年起，當選為世界科學院（TWAS）的院士，從 2017 年起，成為歐洲科學院和藝術學院的積極成員。

他創立台灣大學系統並擔任校長數年，他創立該校，旨在監督和整合台灣中央大學，交通大學，清華大學和陽明大學四所頂尖研究型大學的研究和教學發展。在擔任校長之前，曾是台灣中央研究院副院長，負責國際學術交流計劃以及台灣國際研究生計劃（TIGP）的發展。目前是 NAS，NAE 和 NAM 人權委員會的執行委員，也是聯合國教科文組織包容性掃盲學習計劃的成員。



## ■ 專題報告摘要

### 善治，人工智能和生態—領導和行為改變的新可能性？增強智能的未來學習

與其他動物相比，人類擁有極大的發明創造力和完善工具的能力，以控制及改善物質和精神的世界，因此導致了人類社會複雜的快速發展，其特徵可以說是 8 個 O 的互動模型（8-O: Bio 生物 –Geno 基因 –Neuro 腦神經 –Cognito 認知 –Info 資訊 –Techno 科技 –Medico 醫療 - cultural/Socio 社會）。

我們現處於一個數位世界，高科技和網際網路使我們能夠以水平和垂直的方式，在社會、智力和精神上建立聯繫。在醫療保健方面，資訊數據學和人工智能提供的大數據，令預防性醫療和精確醫療成為可能。同樣非常清楚的是，由於跨國的商業與工業，跨各洲大陸的空中、海上和高鐵的便捷交通，令文化的特殊性和社會價值正在迅速變化。

大腦 / 心智連接重組後的一個明顯行為後果就是，人類訊息處理（HIP）的架構從純粹的初級生物學習機制轉變為二級認知學習平台，允許進行層次化組織和策略規劃，從而提高了快速精確存儲 / 檢索操作的質量和靈活性。從某種意義上說，未來的學習特色是：動態系統的混合屬性交互迴旋，可以解釋為，解決問題能力增強、積極改變環境，可以用  $f ( THIP \times PBL \times SCL \times K \times E )$  公式來表示，其中 THIP 指轉化後的人類訊息處理，PBL 指初級生物學習，SCL 指第二級認知學習，K 指知識，E 指經驗。

換句話說，在未來複雜世界中的領導力涉及策略性思維和有意義的執行處理複雜問題，而不僅僅是執行學到的行動計劃。從這個角度來看，我們還需要討論人工智能（AI）的含義。人類通過語法和軟體工程來創建人工智能（AI），以替代解決問題中的例行程序和複雜程序。在某些特定領域中，人工智能在沒有“個人的”知識情況下挑戰並戰勝人類自然智能（NI），“個人的”知識是指對特定領域的問題有“同情心” “好奇心” 和 “知道的感覺” 。



基本上，人工智能是一種複雜工具，具有快速、龐大數據存儲力、及根據深度學習算法的強大計算能力。Deep Mind 的 AlphaGo 和 AlphaZero 最近在國際象棋比賽中大獲全勝，顯示了戰略、理解、規劃和見識不需要用到強力的機器運算。例如，AlphaGo 通過深度神經網絡訓練來預測棋盤位置的價值，使用過去數百萬場的遊戲作為訓練數據；此外，AlphaZero 完全是通過玩遊戲本身來學習的，後來，AlphaZero 透過單一網絡訓練（也是完全自玩遊戲，並且沒有任何遊戲專門知識）獲得更進一步的發展，在三種不同的遊戲中展示出舉世無雙的表現：GO、象棋、和日本將棋。現在，AlphaFold 以多年使用大量基因組數據的研究為基礎，將其計算能力擴展到原來特定領域之外，預測蛋白質結構精確的 3D 模型。

回顧過去，從 AlphaZero，AlphaZero 到 AlphaFold，人工智能的成功在於透過思考變得更聰明而不是更快。知道要考慮什麼和要忽略什麼是比較明智的。從某種意義上說，AI 人工智能通過探索各種計算方法來模擬人類的思維，但是 AI 是否能更富有同情心，對世界、及其自身俱有自發的好奇心？它會在生活經驗中欣賞、享受並尋求正念嗎？AI 是否有可能發展出一種心智理論，並可以產生自發性的即興幽默呢？讓我們用我們的 NI 人類自然智能嘗試形象化未來的 AI。

此刻，AI 提供了一個機會，可通過以下公式來增強人類的智能： $(AI \times NI \times K \times E) =$  增強智能（可幾乎無限擴展的智能）。換句話說，在未來世界中，兩個大腦（AI 和 NI）比任何一個大腦好。我們的下一個重要任務是找出什麼、為什麼、以及如何做？



## 專題報告摘要

### 如何組織跨學科作為生態變化的生產工具？

#### 智慧未來農業的跨學科解決方案

從受污染的土地，到受污染的海洋，再到受污染的空氣，地球在身體上都處於嚴重的麻煩中。由於全球變暖，我們還目睹了越來越多的極端天氣變化。安全食品生產的短缺到處都是。在 30 年內，全球總人口預計將達到 75 至 105 億，這無疑將加劇糧食需求壓力，並抬高糧食價格。任何單一學科都無法解決這麼複雜的問題。他們呼籲跨學科的合作，以達成一個明智的解決方案。首先，它要求農業規劃者在智能管理的幫助下，開發出完整的綠色和智能農業總體解決方案，以種植更健康的高價值農作物。通過傳感器、智能設備、物聯網（IoT）和大數據分析，我們可以將知識數字化，以自動化生產並簡化操作來優化產品。通過計算機系統追蹤這些數據，實現智能生產和數字化行銷。其次，我們需要整合各種有用的技術來完成農場的個性化設計，從而降低技術農業的門檻，並為新一代創造一個智能的農業管理環境。第三，核心農業技術應包括無毒環境監測、細菌分佈數據庫、病蟲害和真菌病 AI 預報系統、和生態友好型生物農藥。同樣的，基因研究中的 CRISPR-cas9 技術將是用於疾病控制的重要工具。最後，智能生產技術和智能管理應用程序可以幫助所有農民克服挑戰，提高整體生產效率和數量，以確保農作物的食品安全，增加農民的利潤，最重要的是減輕環境負擔。智慧農業的願景要求跨學科的知識整合，目前國立交通大學南校區正進行實驗計劃。這些都是要實施的新計劃，我將在小組討論中重點介紹其中的一些計劃。



## 安娜斯塔西婭 · 扎巴尼奧圖教授 (Anastasia Zabaniotou)

希臘亞里士多德大學化學工程系

Anastasia Zabaniotou 是希臘塞薩洛尼基亞里斯多德大學工程學院化學工程系教授，她擁有博士學位，以及法國巴黎中央大學的 DEA。她曾在歐洲委員會研發總部工作，並一直擔任專家。

她是國際可再生能源網絡和會議（英國 WREN / WREC）的生物資源和生物能源主席、中國能源與環境網絡（中國 BEE-RCN）的成員、亞里士多德大學國際合作委員會的成員、亞里斯多德大學的 TIME 網絡的協調員（國際雙學位網絡，由巴黎中央大學協調）、和 RMEI（地中海工程學校網絡）的董事會成員，在地中海地區實施永續發展目標與和平工程的教育。

她對跨學科和跨學科研究與教育特別感興趣。她參與的活動涉及科學和社會、環境和永續發展的意識覺醒、氣候變遷、可再生能源、永續發展性、復原力和性別平等。

她的研究致力於透過包容性和社會認可度，將生物質與材料閉環和可再生能源，廢物轉化為能源，生物燃料以及永續發展性進行級聯使用。她參與並協調了許多國家和國際 R & I 計劃。她的作品曾八次獲得創新和卓越獎。她是 112 篇國際期刊論文和約 250 場會議演講的作者和合著者。她曾經先後訪問了全球 40 多個國家 / 大學，並作為許多國際會議的主講嘉賓。她還主織了多次會議、研討會和活動。

她於 2016 年在希臘舉辦了“關於希臘的國際研討會和講習班”，主題是“在氣候變遷和社會動蕩的背景下循環經濟和生物資源的永續發展利用”。2018 年 8 月，她榮幸地被世界能源論壇邀請作為中國 2018 年國際蒙古國際能源大會的主講人。同年，她因在 WREC（倫敦世界可再生能源大會）上在生物能源研究方面



的卓越表現而獲獎。2019年1月，亞里士多德大學因其國際合作與活動成就授予獎項。

她認為，創新和轉化性的學習在教育中應發揮更大的作用，因為這種認知與科技成就、發明和創新息息相關。通過了解我們的意識、思想和行為對世界 / 地球的影響之間的關聯性，可以帶來任何社會或環境系統的長期改變。因此，她對使人們理解意識與行動之間的關係的教學感興趣，對建立基於價值的教育感興趣，年輕的科學家可以通過參與該教育，產出永續發展性的解決方案及所期待的結果，並為整個世界帶來和平與福祉。

研究領域與計劃包括：

- 生物經濟、層疊效應生物煉油廠、循環經濟、綜合性永續發展
- 從農業殘留物生產活性炭
- 通過熱化學轉化實現基於污泥的生物燃料
- 橄欖籽廢渣中活性炭
- 通過集成工藝將生物質熱化學轉化為第二代生物燃料
- 玉米殘渣（玉米芯和秸稈）中生產能源，燃料，材料和化學品的潛力
- 農業殘留物中製備活性炭以吸附農藥
- 橄欖渣（切屑和果仁）快速熱解產物的產率和動力學
- 高效且環保的舊輪胎熱解技術
- 塞浦路斯水泥窯中的綠色能源：使用污泥作為常規燃料的替代品

## ■ 專題報告摘要

### 協調生物資源和經濟利益的永續發展性回應和創新

全球挑戰既複雜又相互關聯。解決方案需要跨學科知識、系統方法、合作和增強的人類道德責任。全球轉型需要新的思維方式進行，並將其納入決策制定中。永續發展教育在社會轉化中起著關鍵作用。教育轉型需要自然科學、技術和社會科學的跨學科方法，適當的美德倫理學和地方性知識創新，參與其中的社會觀點和改變的領導力。需要轉化性的學習，才能從當前複雜而邪惡、又相互作用導致功能失調的全球挑戰模式中，轉變為更俱生命力功能。永續發展性與地方、區域乃至全球，不同規模系統的健全與復原力有關。永續發展需要適應和緩解氣候變遷，以及長期的資源和能源安全，這對可再生能源、能源和材料的更高效率提出了高要求。在計劃和決策過程中，需要將系統與重要的交互系統（例如生態系統）一起進行分析。

本演講旨在重點介紹從過渡邁向永續發展的途徑，透過討論實現生物資源與經濟利益協調一致的永續發展對策和創新。將介紹生物資生成的奇蹟（陸地和海洋生物質的光合作用），及永續利用的生物質，通過環境、技術、經濟，社會角度和哲學方法的思維。討論生物承載力概念及其平衡、永續發展性的維度，循環經濟和生物經濟概念，這些都是永續發展的支柱。重點是永續發展利用可再生生物資源來生產食品、纖維、生物能源和生物源產品，以實現生物源經濟。生物燃料生產，和層疊效應的生物能源系統的生物質計劃，涉及各種利益相關者（農民、最終用戶、地方規劃者，非政府組織（NGO），政府代表，各種行業和社區），它們在生物資源開發中扮演重要作用。在區域性永續發展下，為了具復原力的基礎建設和社區活力，必須適當地解決科技、地方性方法、社會經濟、環境問題，包括大眾接受度等問題，並將科技與產品的開發，結合地方性知識、道德、法律和社會影響，令其具包容性和響應能力。

以自然為基礎的解決方案，及仿生的綠色經濟實踐鼓勵了新的工業範例。將科技引用至商業方法中，以技術驅動的創新被負責任的研究與創新（RRI）取代，RRI 是歐洲委員會一種旨在促進包容性和永續發展性研究與創新政策的設計，研究、創新與價值一致的方法，社會的需求和期望，除了科學 / 科技的進步和經濟成長之外，並以實現道德和社會責任為目標。



## 亞歷山大賓士博士 (Alexander Benz)

德國慕尼黑大學人類科學中心

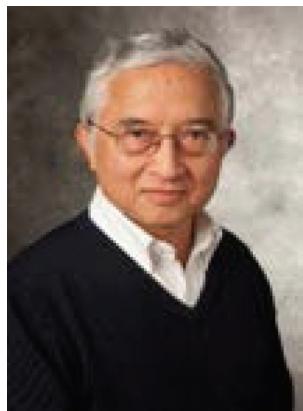
亞歷山大賓士是德國慕尼黑大學醫學心理學研究所的講師和科學協調統籌員。在德國弗賴堡大學和施派爾行政管理大學接受法律培訓。在加拿大溫哥華的不列顛哥倫比亞大學接受調解和仲裁的培訓。自 1999 年以來，他一直是德國律師協會的會員。他一直在多個本地和國際企業擔任業務教練和顧問，例如德國斯圖加特的奔馳和德國埃斯林根的 FESTO 集團，改善公司的策略和知識流程。

2006 年，他開始在慕尼黑大學人文科學中心與恩斯特·波佩爾教授的知識應用計畫合作，開發新的學習與教學形式。2011 年，他成為醫學心理學研究所的講師。他開始每學期 850 名的學生協調統籌學院的教學工作和創新教法。

他的研究興趣圍繞在教育心理學，著重於個性化、探索型或問題型的學習。過去幾年，他的研究領域獲得醫療保健中的永續性、跨學科與溝通的研究補充。他著作或編輯了許多國際報告、文章、手冊、和會議演示。

在過去的十年中，他管理了一項由歐盟資助的跨國計時生物學研究計劃 (Euclock)，並與州立埃斯林根國家教師培訓學院 (MC4VEd – 大規模客製化職業教育，在職訓中開發和保存關鍵知識) 合作開展並協調許多國際計劃。

他認為，我們生活在一個知識驅動的社會中，但有時關鍵性知識會丟失或遺忘，大多數人沒有意識到，知識很可能是唯一越用越多，越分享越多的資源。因此，科學、社會和環境的未來，取決於我們是否有能力更好地利用所有的知識與技能，還有，所有人都必須更好、更有創造力地合作交流，讓世界成為一個更美好的地方，為我們自己也為未來的世代。



## 魯本哈比托教授 (Ruben Habito)

美國德州南部衛理公會大學教授

魯本哈比托，菲律賓人，是世界宗教與靈性學教授，也是珀金斯神學院的靈性修煉部門主任。他曾擔任過學術事務副院長（2005-2008）。在 1989 年加入珀金斯大學之前，他曾是耶穌會會員 25 年，並在日本耶穌會的上智大學任教。

在菲律賓的馬尼拉雅典大學完成本科學習後，哈比托在東京大學完成了佛教文學碩士和博士學位的研習，並在東京上智大學完成神學的專修課程。他的學術興趣包括東亞宗教研究、佛教批判性建設思維、比較神學、宗教與社會問題、靈性與社會生態參與、宗教間研究以及相關領域。

他是許多日文和英文文章和書籍的作者，包括《寂靜中認識：禪與聖經》（Orbis，2017 年）和《禪與靈性練習》（Orbis，2013 年）。他還擔任 Maria Kannon Zen 中心的指導老師，與妻子 Maria Reis Habito 一起居住在達拉斯，他們有兩個成年的兒子，Florian 和 Benjamin。



## 瑪莉哈萊斯比托博士 (Maria Reis-Habito)

台灣世界宗教博物館國際事務主任

瑪莉哈萊斯比托 ( Maria Reis Habito ) 是台北世界宗教博物館的國際事務主任，從她位於達拉斯的辦公室處理以跨宗教為主題的研討會和會議。她也是以利亞宗教信仰學院的美國代表，並曾任 Fetzer 學院世界宗教與靈性理事會的顧問。她是日本禪宗 Sanbokyodan 傳承授權的禪宗老師。在此之前，她曾任南方衛理公會大學歷史學系兼任教授，同時還擔任過東亞歷史和其他與亞洲宗教和靈性有關的課程。她畢業於慕尼黑大學，並取得博士學位，曾在台灣台北和日本京都學習。她的出版作品包括德語學術標題，以及英語編輯作品，例如《心靈之道：心道法師的法教》（創作空間出版社，2016 年）；《心連心：拉達克的回佛對談》，2010 年；《聆聽：2002-2004 年回佛對談》（台灣台北，MWR），以及學術期刊上的大量文章。



## Myint Thu Myaing 教授

緬甸仰光大學教授兼法律系主任

Myint Thu Myaing 於 1985 年獲得第一個法律學位，1992 年獲得法學碩士學位，並於 2005 年獲得了仰光大學的博士學位；2000 年獲得仰光經濟學院的管理與行政文憑，2003 年獲得 WIPO 和意大利都靈大學的知識產權法碩士學位。

自 1986 年以來，一直在仰光大學、東仰光大學和緬甸南部孟邦的毛淡棉大學任教。教授全日制法學學士和法學碩士課程，提供給公務員和專業人員的商法和知識產權法文憑課程，以及仰光大學的博士學位預備課程。教學主題是知識產權法、國際環境法和投資法。專業知識和研究興趣領域是知識產權法、國際環境法和投資法。一直從事於指導碩士研究生和博士學位候選人的論文，另外也教授環境研究中的環境政策和法律研究生文憑課程（PGDES）。



## ■ 專題報告摘要

### 緬甸環境保護法

環境法是控制和規範人類對環境影響的法律。人類不僅利用環境來生存，也通過利用國家資源來改善生活水平，但同時也對所居住的環境造成污染。環境問題沒有界限。因此，已經締結了各種國際環境協定，並頒布了國家法律以控制污染和其他環境損害。各國頒布和修訂其內部立法與行政措施，以保護環境、促進環境管理和永續發展。緬甸政府有義務根據 2008 年《緬甸聯邦共和國憲法》保護和養護自然環境。

在國際上，緬甸參加了與緬甸相關的幾項國際協議，簽署、批准、並加入國際環境公約。在國內，它宣布了國家環境政策。《刑法典》對影響公共衛生和環境的犯罪規定了刑罰。緬甸與環境有關的主要立法包括 2012 年《環境保護法》、2014 年《環境保護法》、2015 年《環境影響評估規則》和《緬甸 21 世紀議程》。此外，緬甸針對不同部門頒布了許多與環境有關的法律，例如：行政部門、農業和灌溉部門、文化部門、都市發展部門、財政和收入部門、林業部門、衛生部門、酒店和觀光部門、工業部門、畜牧業和漁業部門、採礦部門、國家計畫和經濟發展部門、科技部門和交通運輸部門。



## **Khin Khin Soe教授**

緬甸仰光大學地理系教授

### **教育**

博士學位 -2003 年 6 月 -2008 年 6 月 - 仰光大學地理系  
碩士 -1993 年 12 月至 1995 年 12 月 : 仰光大學地理系  
學士 -1983 年 12 月至 1987 年 12 月 : 仰光大學地理系

### **職責**

擔任緬甸仰光大學與德國科隆大學在緬甸合辦的”轉型過程”第二、三、四次國際會議（2017-2019）之秘書長。

教學、研究、都市和區域發展卓越中心（CoE）的共同負責人，質量保證（QA）的核心團隊成員，2019 年西蒙 · 弗雷澤大學（Simon Fraser University）主辦之仰光大學環境研究所碩士課程研發

### **學術工作**

1990-1997 年 : 仰光區 Thanlyin 鄉納丁貢小學教師  
1997-2005 年 : 仰光地區仰光市東仰光大學講師  
2005-2010 年 : 緬甸卡音州帕安大學助理講師  
2010-2015 : 緬甸仰光大學講師  
2015 年至今 : Taungoo 大學和仰光大學副教授

### **教學概況**

1. 研究生課程中的所有科目
2. 碩士課程
3. 研究生文憑（環境研究）
4. 研究生文憑 { ( 地理訊息系統 (GIS) ) }

## 研究重點和研究計劃

內比都的實地研究，主題為”教育、健康住房、人口統計等：”內比都的開發”，此案與”81+ 都市網絡系統”研究計畫有關。

“81+ 都市網絡系統”是多個機構聯合的合作計畫：德國科隆大學地理學院，仰光大學都市與住房發展系 (DUHD)、緬甸德國都市與區域發展研究合作組織建設部門、仰光大學地理系、和都市與區域發展卓越中心 (CoE)。

其他與 +81 有關實地研究案還有：

勃固，主題為“勃固的遺產與發展”

臘戌，主題為”臘戌的聯合貿易與發展”

欽邦，主題為”欽邦哈卡和法拉姆的農業和發展潛力”

東枝，皮耶和毛淡棉，主題為”農業和旅遊業發展”

## 當前研究計劃

1. 緬甸快速成長的特大都市中極端事件中的多重風險管理，與德國科隆大學地理研究所Frauke Kraas教授、仰光都市發展委員會、和緬甸仰光大學聯合指導。
2. 風險防範和教育的角色在非正式定居中的作用：對緬甸仰光Dagon Seikkan鄉鎮第67號病房的初步調查。
3. 緬甸孟邦毛淡棉市的都市遺產，與德國科隆大學地理研究所Frauke Kraas教授聯合指導。

## ■ 專題報告摘要

### 緬甸的城鄉發展：都市農業的影響

都市農業有助於當地的經濟發展、貧困的減輕，對都市貧民和婦女的社會包容力、都市的綠化、和都市廢物有效率的再生利用。這項研究旨在找出都市農業與環境之間的關係。緬甸的都市農業從 2000 年開始，農業是緬甸的主要經濟活動，這意味著都市農業很可能有延續性的實踐和發展，從而影響各地不同的環境。因此，本文旨在確定都市農業的實踐、為什麼進行都市農業、以及該實踐對環境的一般影響。對於生產者和消費者而言，都市生態系統既具有健康衛生上的風險，又有經濟和環境效益。農業是生態系統的關鍵部分，風險的產生來自於在人口稠密地區使用傷害性有毒物質，同時經土壤或水的滲入，直接成為生產者生態系統生化污染物的途徑，或間接促使污染物進入都市食品系統。農民通常會忽略使用劇毒、不安全的農藥、或僅僅使用過多的農藥，都可能對健康造成不好的影響。研究結果表示，都市耕種一般是在自己家庭位於河邊或公路邊的土地上進行。緬甸各區的都市農業，在確保人口糧食安全方面發揮著重要作用。此外，特別是在欽邦，任何多出的部分都會被賣出，以創造收入及用於用途，例如支付學費、服裝和投資。緬甸許多地方，特別是 Hamwbi，Tyeikkyi 和 Hlaygu 等鄉鎮的園丁，正在從事都市農業。

關鍵詞：都市農業，緬甸，環境，生態系統，影響



## Larry Wong博士

緬甸許多機構的高級顧問

Wong Larry 博士在開發、業務規劃與實施、及政策分析方面擁有 40 多年的運營經驗。他持續以智庫和國際發展代理人的身份參與不同公共或私人的行業。他的主要專長領域包括：農業食品供應/價值鏈和貿易關係的開發與管理、農業商業和農業企業、公家 - 私人 - 合作的農業關係、區域整合、糧食安全（糧食 - 水 - 能源之關係）、和永續發展。他是緬甸 Praxis 有限公司的聯合創辦人、Lannew Resources Sdn Bhd 的主管、緬甸稻米聯合協會（MRF）及其業務部門緬甸農業綜合企業公共公司（MAPCO）的高級顧問、馬來西亞戰略與國際研究所（ISIS）訪問學者、及緬甸經濟與社會發展中心（CESD）訪問學者。他擁有英國坎特伯雷肯特大學的經濟學博士學位，和澳洲新英格蘭大學農業經濟學與商業管理系經濟學碩士學位。

他曾為世界銀行、國際金融公司、亞洲開發銀行、聯合國開發計劃署、糧食與農業組織、聯合國亞太經濟社會委員會、國際糧食政策研究所、美國國際開發署和國際稻米研究所、以及許多國家的政府和企業集團提供諮詢服務，如東盟的馬來西亞、緬甸、越南、高棉、柬埔寨、印尼、泰國、非洲的幾內亞、加納和莫桑比克、以及古巴、蒙古和烏茲別克斯坦。

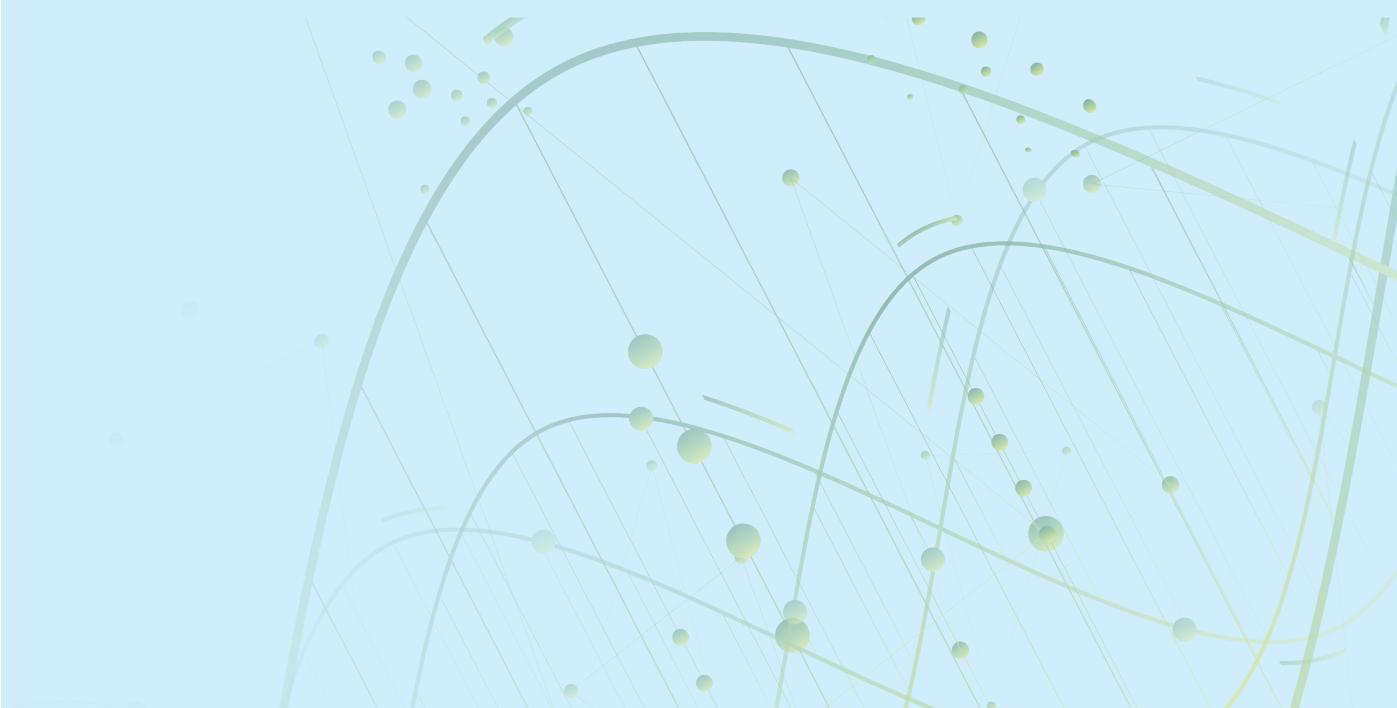
自 1997 年以來，他一直參與緬甸的私人領域和公共部門，當時他領導 BERNAS'（馬來西亞公開上市的私有化前國有貿易企業）國際農業商業公司，從事橫跨亞洲和非洲的貿易網絡供應鏈之開發與管理。他後續的諮詢、智庫和國際開發代理的角色使他實際參與了幾乎所有緬甸各地，與氣候智能農業商業價值鏈（“從種子到貨架”以及“從農場到叉子”），稻米、豆類、油籽、水果和蔬菜和漁業，及它們各自的貿易網絡，包括一般貿易和邊境貿易。

他是亞太農業政策（APAP）論壇的董事會成員，也是《亞洲農業與發展雜誌》（AJAD）編輯委員會的成員。自 1990 年代末期以來，他開始練習內觀禪修，並每年在緬甸的 Panditarama 森林禪修中心進行靜修活動，在那裡他經常短期出發。



# Program in Details

## 詳細課程表



# The Winter School 2020 Program Overview

## 2020 年冬季學校課程大綱

	Wed 1/5	Thur 1/6	Fri 1/7	Thur 1/8	Sat 1/9	Thur 1/10	Sun 1/11	Thur 1/12
W i n t e r  s c h o o l	Arrival of Staff 教職員/學生抵達仰光	Arrival of Faculty and Students 教職員/學生抵達仰光	Arrival of Faculty and Students 教職員/學生抵達仰光	Opening Ceremony 開幕典禮	Lunch 午餐	Lectures/ Panel/ Discussion 講座/小組討論		Outdoor Visit 戶外教學
				Ice breaking session/ Outlines / Expectations/ Lecture 認識/ 課程介 紹/期望				
						D I N N E R		
			Welcome Meeting hosted by Master Hsin Tao 學生歡迎會					
8:00-8:30 pm				Meditation 禪修	Meditation 禪修	Meditation 禪修	Meditation 禪修	Meditation 禪修
Remarks								



Mon 1/13	Thur 1/14	Tue 1/15	Thur 1/16	Wed 1/17	Thur 1/18	Thu 1/19	Fri 1/20
Lectures/ Panel/ Disucssion  講座/小組討論	Project Group Discussion  項目小組討論	Festive Lunch  Yangon City tour  仰光市區觀光	Presentations/ Final Discussion  小組簡報/ 討論	Closing Ceremony  閉幕典禮	Lunch 午餐	Departure of Faculty and Students  教職員/學生離開仰光	Departure of Staff  離開仰光
6 PM Visit Shwedagon Pagoda  大金塔點燈儀式				Review Meeting with Faculty and Advisors  課程檢討會			
	Meditation 禪修	Meditation 禪修	Meditation 禪修	Meditation 禪修			

# The Winter School 2020 Daily Schedule

## 2020 年冬季學校每日課程表

**Wednesday, January 8, 2020      2020 年 1 月 8 日星期三**

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:45-08:50	Breakfast 早餐	Participants staying at Meditation Center 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		Participants staying at Merchant Art Hotel 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-09:15	Opening Ceremony 開幕	Meet and Greet 歡迎	All	New Hall G/F
09:15-09:25		Video 影片		New Hall 4/F
09:25-09:40		Welcome Address 歡迎辭	Dharma Master Hsin Tao 心道師父	
09:40-10:00		Speeches - Guest of Honor 榮譽嘉賓致辭		
10:10-10:20		Myanmar Performance 緬甸民藝表演		
10:20-10:40		Speeches - Guest of Honor 榮譽嘉賓致辭		
10:40 -10:50		Video 影片		
10:50 -11:00		Special Remarks 開幕致辭	Prof Michael von Brück	
11:00-11:10		Photo Session 團體照	All	
11:15-12:45	Lunch 午餐			New Hall G/F
12:45-13:00		Preparation for Lectures 開課準備		New Hall G/F
13:00-14:00	Lecture 講課	Get to Know Each Other 互相介紹	All	New Hall G/F
	Lecture 講課 Key Note Speech 主題演講	Outlines for the Winter School 冬季學校大綱	von Brück	New Hall G/F New Hall G/F
		Plenary Discussion: Our Expectations 全體討論：我們的期望	All	
14:00-15:00		The Root Causes and Triggers of Environment and Natural Resource Conflicts 環境與自然資源衝突的根本原因和誘因	Prof. Dr. Nay Htun	
15:00-16:00	Break 休息			
16:00-17:30	Panel Discussion: 1 專題小組討論 : 1	How to Turn Ecological Theory into the Art of Application? Experiences and Strategies  如何將生態學理論轉化為應用藝術？ 經驗與策略	Tammy Turner, Kenneth Pugh, Peter Edwards	New Hall G/F
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		Free Time 自由活動		
20:00-20:40		Chan Meditation 禪修	Master Hsin Tao	New Hall 1/F
20:40		End of The Day 結束		

Thursday, January 9, 2020

2020 年 1 月 9 日星期四

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜珈課  (individually and/or guided)	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel</b> 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-11:00	Panel Discussion: 2 專題小組討論：2	<b>Motivation and Change - Courage and Insight: Social-Psychological Aspects and Communication Processes</b> 動機與變化 - 勇氣與洞察力：社會心理方面和溝通過程	Michael von Brück, Kenneth Pugh, Eva Ruhnau	New Hall G/F
11:15-12:45	Lunch 午餐			New Hall G/F
13:30 - 15:00	Panel Discussion: 3 專題小組討論：3	<b>Good Governance, Artificial Intelligence and Ecology – New Possibilities for Leadership and Change in Behaviour?</b> 善治、人工智能和生態學領導力和行為改變的新可能性？	Nay Htun, Eva Ruhnau, Ovid Tzeng	New Hall G/F
15:00-16:00	Break 休息			New Hall G/F
16:00-17:30	Panel Discussion: 4 專題小組討論：4	<b>How to Organize Interdisciplinarity as a Productive Tool for Ecological Change?</b> 如何將跨學科組織為生態變化的生產工具？	Alexander Benz, Ovid Tzeng, Anastasia Zabaniotou	New Hall G/F
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time</b> 自由活動		
20:00-20:40		<b>Chan Meditation</b> 禪修	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day</b> 結束		

**Friday, January 10, 2020**

**2020 年 1 月 10 日星期五**

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜伽課  <b>(individually and/or guided)</b>	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel</b> 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-11:00	Panel Discussion: 5 專題小組討論 : 5	<b>Transformations in Energy and Traffic – Technologies, Changing Infrastructure and the Social Dimension</b> 能源和交通的變革 – 技術，不斷變化的基礎設施和社會規模	Michael von Brück, Tadeu Caldas, Kenneth Pugh, Tammy Turner	New Hall G/F
11:15-12:45	Lunch 午餐			New Hall G/F
13:30 - 14:30	Special Lecture 特別專題	<b>The Pillars for Strengthening and Accelerating Sustainability : Economic, Social, Ecology, Energy, Ethics – The Imperative for a fast transition towards a Transformational Green Paradigm</b> 加強和加速可持續發展的支柱：經濟，社會，生態，能源，倫理 – 快速向轉型綠色範式過渡的必要	Prof. Dr. Nay Htun	New Hall G/F
14:30-16:00	Break 休息			New Hall G/F
16:00-17:30	Panel Discussion: 6 專題小組討論 : 6	<b>Changing Financial Systems and Strategies for Ecological Planning (in Forestry and Agriculture)</b> 不斷變化的金融系統和生態規劃策略（林業和農業）	Tadeu Caldas, Peter Edwards, Nay Htun	New Hall G/F
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time</b> 自由活動		
20:00-20:40		<b>Chan Meditation</b> 禪修	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day</b> 結束		



Saturday, January 11, 2020

2020 年 1 月 11 日星期六

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜伽課 (individually and/or guided)	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel</b> 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-11:00	Lecture/ Workshop 講座 / 工作坊	<b>Ecological Project in Myanmar I : Lampi Marine National Park, Myanmar</b> 緬甸生態項目 I : 緬甸蘭皮海洋國家公園	Elisa Facchini	New Hall G/F
11:15-12:45	Lunch 午餐			New Hall G/F
13:30 - 14:45	Special Lecture 特別專題	<b>Ling Jiou Mountian Buddhist Society: Education and Organic Farm in Naungmon, Myanmar</b> 靈鷲山佛教教團：在緬甸弄曼的教育和有機農業發展	Heng Ming Shih 恆明法師	New Hall G/F
14:30-16:00	Break 休息			New Hall G/F
16:00-17:30	Panel 專題討論	<b>Projects in Myanmar II: Transformative Leadership for Ecological Action – Legal and Administrative Opportunities in Myanmar</b> 緬甸項目 II： 生態行動的變革性領導力 – 緬甸法律和行政機會	Myint Thu Myaing & Khin Kin Soe	New Hall G/F
		<b>Rural and Urban Development in Myanmar</b> 緬甸的城鄉發展	Khin Kin Soe	
		<b>National and International Law Relating to Environment I Conservation</b> 有關環境保護的國家和國際法	Myint Thu Myaing	
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time</b> 自由活動		
20:00-20:40		<b>Chan Meditation</b> 禪修	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day</b> 結束		

Sunday, January 12, 2020

2020 年 1 月 12 日星期日

Time 時間	Description 描述
07:00-07:45	<b>Breakfast</b> 早餐
07:45-08:00	<b>Gathering at LJM Meditation Center</b> LJM 會館集合
08:00	<b>Departure for Outdoor Visit</b> 出發戶外參觀
08:00-10:00	<b>Coach Transfer</b> 旅遊車接送
	<b>Locations to be confirmed</b> 地點待定
18:00	<b>Dinner at the Center</b> 會館晚餐

Monday, January 13, 2020

2020 年 1 月 13 日星期一

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜伽課 (individually and/or guided)	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館 <b>Participants staying at Merchant Art Hotel</b> 飯店	Faculty and Advisors 老師 & 顧問 Students and Staff 學生 & 職員	New Hall G/F Hotel Cafe
09:00-11:00	Panel Discussion: 7 專題小組討論 : 7	<b>Biodiversity. How to Reconcile Biological Life and Economic Interests?</b> 生物多樣性。如何調和生物生命與經濟利益？	Peter Edwards, Tammy Turner, Anastasia Zabaniotou	New Hall G/F
11:15-12:45	Lunch 午餐			New Hall G/F
13:15 - 14:15	Discussion	<b>Session for the Constitution of Groups</b> 項目小組制定會議	von Brück	New Hall G/F
14:15 - 16:45	Group Discussion 小組 討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
17:00-17:45	Dinner 晚餐			New Hall G/F
18:00-20:00		<b>Ceremony at Shwe Dagon Pagoda</b> 參訪 ShewDagon 大金塔 及 典禮	Master Hsin Tao	
20:30		<b>End of The Day</b> 結束		

Tuesday, January 14, 2020

2020 年 1 月 14 日星期二

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜伽課 <b>(individually and/or guided)</b>	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel</b> 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-11:00	Group Discussion 小組 討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
11:15-12:45	Lunch 午餐			New Hall G/F
13:30 - 15:30	Group Discussion 小組 討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
15:30-16:30	Break 休息			New Hall G/F
16:30 - 17:30	Group Discussion 小組 討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time</b> 自由活動		
20:00-20:40		<b>Chan Meditation</b> 禪修	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day</b> 結束		

Wednesday, January 15, 2020

2020 年 1 月 15 日星期三

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜伽課 <i>(individually and/or guided)</i>	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel</b> 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-11:00	Group Discussion 小組討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
11:15-12:45	Lunch 午餐			New Hall G/F
13:30 - 15:30	Group Discussion 小組討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
15:30-16:30	Break 休息			New Hall G/F
16:30 - 17:30	Group Discussion 小組 討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time</b> 自由活動		
20:00-20:40		<b>Chan Meditation</b> 禪修	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day</b> 結束		

Thursday, January 16, 2020

2020 年 1 月 16 日星期四

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class</b> 瑜伽課  (individually and/or guided)	von Brück	New Hall 1/F
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center</b> 會館	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel</b> 飯店	Students and Staff 學生 & 職員	Hotel Cafe
09:00-10:30	Group Discussion 小組 討論	<b>Groups on Projects</b> 計畫小組	All	Locations TBC
10:30-11:00	Coach Transfer 旅遊車接送			
11:15-12:45	Lunch 午餐	<b>Special Festive Lunch</b> 特別午餐	All	Locations TBC
13:15-17:00	Tour 觀光	<b>City Tour in Yangon</b> 仰光城市觀光	All	Locations TBC
17:00-18:00	Coach Transfer 旅遊車接送			
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time</b> 自由活動		
20:00-20:40		<b>Chan Meditation</b> 禪修	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day</b> 結束		

**Friday, January 17, 2020**

**2020 年 1 月 17 日星期五**

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:00-07:45	Morning Exercise 早課	<b>Yoga class 瑜伽課</b>	von Brück	New Hall 1/F
		(individually and/or guided)		
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center 會館</b>	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel 飯店</b>		
09:00-11:00	Group Discussion 小組討論	<b>Group Presentations in Plenary 在全會上計畫小組報告</b>	All	Locations TBC
11:15-12:45	Lunch 午餐			New Hall G/F
13:30 - 15:30	Plenary 全體會議	<b>Final Discussion in Plenary: Evaluation of the Winter School Experience Developments of ULP in the Future</b>  全體會議最後討論： 冬季學校經驗評估 ULP 的未來發展	All	Locations TBC
15:30-16:30	Break 休息			New Hall G/F
16:30 - 17:30	Plenary 全體會議	<b>Continuing Final Discussion in Plenary 繼續最後討論</b>	All	Locations TBC
18:00-19:00	Dinner 晚餐			New Hall G/F
19:00-20:00		<b>Free Time 自由活動</b>		
20:00-20:40		<b>Chan Meditation 禪修</b>	Master Hsin Tao	New Hall 1/F
20:40		<b>End of The Day 結束</b>		



Saturday, January 18, 2020

2020 年 1 月 18 日星期六

Time 時間	Theme 主題	Description 描述	Speakers 講者	Venue 地點
07:45-08:50	Breakfast 早餐	<b>Participants staying at Meditation Center 會館</b>	Faculty and Advisors 老師 & 顧問	New Hall G/F
		<b>Participants staying at Merchant Art Hotel 飯店</b>	Students and Staff 學生 & 職員	Hotel Cafe
09:00-11:00	Closing Ceremony 閉幕儀式	<b>Closing</b> 閉幕	All	New Hall G/F
11:15-12:45	Lunch 午餐			New Hall G/F
13:00		冬季課程結束	All	

# Participants Summary 與會者資料

## Research Fellows 2020 – Summary

No.	Name	Title	Nationality	Academic Background/ Current Occupation
1	Ali Beryani	Mr	Iranian	Research Assistant, Polytechnic University of Turin, Italy
2	Ndapile Bwanausi	Ms	Malawi	Fellow under the United Nations University
3	Thomas Carey	Mr	British/ German	Mathematics BA
4	Shuai Chen	Ms	Chinese	Master of Psychology, Peking University
5	Lillian Childress	Ms	American	Master of Environmental Management
6	Daniel Csonth	Mr	Hungarian	Master of Environmental Management
7	Britta Dosch	Ms	American	Master of Environmental Management
8	Austin Dziki	Mr	American	Master of Environmental Management
9	Madeline Frieze	Ms	American	Master of Environmental Management
10	Kareem Hammoud	Mr	American	Master of Environmental Management
11	Mario Karaboga	Mr	Italian	M.Sc. in Banking and Finance
12	Liemo Likoti	Ms	Lesotho	Senior Soil and Water Conservation Officer (Ministry of Forestry Range and Soil Conservation)
13	Brahmi Pugh	Ms	American	MSc, Sustainable Resource Management
14	Yifan Zeng	Ms	Chinese	Bachelor of Psychology
15	Emily Zhang	Ms	Chinese	Master of Philosophy in Theoretical and Applied Linguistics

## State Pariyatti Sasana University

16	Indaka	Ashin	Myanmarese	MA (Buddhism)
17	Jatila	Ashin	Myanmarese	MA (Buddhism)
18	Sasanavamsa	Ashin	Myanmarese	MA (Buddhism)
19	Sumana	Ashin	Myanmarese	MA (Buddhism)
20	Tejobhasa	Ashin	Myanmarese	MA (Buddhism)

## University of Yangon - Post Graduate Diploma of Environmental Studies

21	May Myat Mon	Ms	Myanmarese	Engineer, Engineering Department of Water & Sanitation, Yangon City Development Committee
22	Phyo Phyo Wai	Ms	Myanmarese	Senior Program Manager, Energy and Climate Change Program, Mercy Corps International
23	Shwunnlak Yadanar	Ms	Myanmarese	Project Coordinator (Environmental), ARTELIA
24	Soe Min Naing	Mr	Myanmarese	Executive Committee Member, Ecosystem Conservation and Community Development Initiative (ECCDI)
25	Tin Nwe Wint	Ms	Myanmarese	Production Engineer, Dragon Groups Company (Soap Factory)

## Facilitators 2020 – Summary

No.	Name	Title	Nationality	Academic Background/ Current Occupation
1	Mengtong Cai	Ms	Chinese	PhD student in Psychology
2	Joseph Kao	Dr	Taiwanese	Commissioner, Ling Jiou Mountain Buddhist Foundation, Taiwan
3	Bao Yi Shih	Ven	Malaysian	Ling Jiou Mountain Wu Sheng Monastery, Taiwan

Degree(s)
MSc in Environmental Engineering-Water Resources, University of Tehran, Iran
BSc in Environmental Sciences, University of Malawi, Bunda College
Queens' College, University of Cambridge
Master of Engineering, Chinese Academy of Science
Yale University, School of Forestry & Environmental Studies
Yale University, School of Forestry & Environmental Studies
Yale University, School of Forestry & Environmental Studies
Yale University, School of Forestry & Environmental Studies
Yale University, School of Forestry & Environmental Studies
Yale University, School of Forestry & Environmental Studies
Yale University, School of Forestry & Environmental Studies
Catholic University of the Scared Heart (UCSC)
Masters in integrated water resource management (IWRM), University of Dare salaam Tanzania
Technical University of Munich
Yuanpei College, Peking University
Department of Medieval and Modern Languages, Cambridge University
State Pariyatti Sasana University
State Pariyatti Sasana University
State Pariyatti Sasana University
State Pariyatti Sasana University
State Pariyatti Sasana University
Master of Science ( Engineering), Civil Water Resources Engineering, Yangon Technological University
Master in Development Management, Asian Institute of Management, Makati City, Philippine.
Bachelor's Degree, Civil Engineering, Mandalay Technological University
B.Sc (Forestry), Yezin Agricultural University
Bachelor of Engineering in Chemical, Yangon Technological University
Degree(s)
MA, Basic Psychology, Peking University, Beijing, China
PhD, Religious Studies, Fu-Jun Catholic University, Taiwan
Bachelor in Veterinary Medicine, Gadjah Mada University, Indonesia

## The Teaching Faculties 2020 – Summary

No.	Name	Title and Institution
1	Prof. Dr. Michael von Brück	Religious Studies, Ludwig Maximilians University
2	Dr. Tadeu Caldas	Global Expert on Substainable Development, Ecotropic Consulting GmbH
3	Prof. Dr. Peter Edwards	Chairs of Substainability Research Initiate of Swiss Academy of Natural Sciences
4	Ms. Elisa Facchini	Project Manager, Lampi Marine National Park Project, Myanmar
5	Prof. Dr. Nay Htun	Founder of GEGG, USA and Myanmar
6	Prof. Dr. Kenneth Pugh	President and Director of Research at Haskins Laboratories, Yale University
7	Prof. Dr. Eva Ruhnau	Scientific Director, Human Science Center, Ludwig Maximilians University
8	Prof. Dr. Ovid Tzeng	Chancellor, Taiwan University System
9	Ms. Tammy Turner	Permaculture Movement, Taiwan
10	Prof. Dr. Anastasia Zabaniotou	Department of Chemical Engineering, Aristotle University of Thessaloniki

## The Advisors 2020 – Summary

No.	Name	Title and Institution
1	Dr.des. Alexander Benz	Institute of Medical Psychology, Ludwig-Maximilians-University Munich
2	Dr. Maria Habito	International Program Director, Museum of World Religions
3	Prof. Dr. Ruben Habito	Southern Methodist University Dallas, Texas
4	Prof. Dr. Myint Thu Myaing	Department of Law, University of Yangon
5	Prof. Dr. Khin Khin Soe	Department of Geography, University of Yangon
6	Dr. Larry Wong	Senior Advisor in various Myanmar institutions

## University for Life and Peace Preparatory Office

No.	Names	Titles
1	Xian Yue Shih	Steering Director
3	Xiru Shih	Digital Content Management Officer
4	Prof. Dr. Michael von Brück	Head of Academic Development
5	Mareile Vaupel	Executive Assistant
6	Prof. Fu-Du Chen	Director of Preparatory Office
7	Lisa Shih	Administrative Officer
8	Yang Chung Ching	Officer - Yangon Office
9	Shen Tien Yu	Technical Officer
10	Doreen Ng	Program Officer





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