

MST Career

Career skills for internationally competitive scientists

Bogor, April 11-14 & May 9-11, 2016

www.MSTCareer.info

Intensive Career Skill Training

at the Faculty of Fisheries & Marine Sciences, Bogor Agricultural University

- **present your research in a convincing, self-confident manner**
- **strengthen your professional networking**
- **learn strategies for successful scientific writing & reading**
- **succeed with job applications & grant proposals**
- **internationalize your career**
- **successfully design research projects**
- **get acquainted with international quality standards**

DAAD



MST Career

career skills for internationally competitive scientists

Intensive Career Training Program (4+3 days) at the Faculty of Marine Sciences & Fisheries, Bogor Agricultural University (IPB)

MST*Career* is an comprehensive career skills training program at the Bogor Agricultural University *complementary* to existing courses that provide scientific knowledge. The course program is targeted to young researchers with potential to become internationally competitive scientists in marine-related fields. It aims to enhance skills that are required to succeed as a marine scientist on an international level. Through attending MST*Career* the participants will be strengthened in

- presenting their research to international audiences in a convincing, self-confident manner
- starting their international networking already at an early phase of their career
- reading & writing articles in international scientific journals
- succeeding with job applications and grant proposals
- designing experiments and research projects
- efficiently profiting from tools and resources commonly used by scientists
- their overview of international career opportunities
- their knowledge on international standards in science

Target group

MSc Students, PhD Students, and scientists in Marine Sciences and related fields who aim to bring their career skills to an international standard.

Language of Instruction: English

Course Dates: April 11-14 & May 9-11, 2016 (full attendance in both course weeks is required)

Contact

Prof. Dr. Indra Jaya (indrajaya@ipb.ac.id, indrajaya123@gmail.com)

Dr. Carsten Thoms (carsten.thoms@gmail.com)

See also www.mstcareer.info for updates

Please do not hesitate to contact us if you have questions!

How to apply

Participants are required to have an on-going or successfully completed research project to present and discuss in the course. A conference poster and an abstract on this project should already exist – also as a basis for discussion and improvement during the training. .

Please submit the following documents as email attachment (as PDF or MS WORD file) to carsten.thoms@gmail.com **before March 20, 2016**:

- Your contact data (full name, email address, phone number)
- *Curriculum Vitae* providing an overview of your professional and educational background as well as your project experience (max. 1 page; please provide dates for each career step)
- Motivation letter (max. one page), including:
 - o a brief statement which benefits you expect from participating in *MSTCareer*
 - o a brief summary of your previous experiences with job applications/interviews, career training courses, scholarships, stays abroad, etc.)
- Materials to jointly work with and to improve during the course; please send these documents as PDF files
 - o an Abstract in English language of one of your research projects (max. 1 page)
 - o a poster that you have previously presented at a conference or workshop
 - o slides of a presentation on your research work

The course participants will be selected based on the above documents.

Course Fees

Rp 450.000 per person (total for both weeks for course materials, coffee break snacks, etc.)

Course Schedule

MSTCareer 2016 is a full-day course that will be held in two separate course weeks (see schedule below). Participants are expected to be present during both weeks at all course days (April 11-14 and May 9-11) to allow for a progressive training with modules that build upon each other and strong group interaction. Please only apply if you are committed to participate full-time.

Course Week 1 (April 11-14)

	Mon (April 11)	Tue (April 12)	Wed (April 13)	Thu (April 14)
<i>morning</i>	Welcome & Introduction	Scientific Reading & Writing	Scientific Presentations (Talks & Posters) Discussion of Posters produced by participants	Oral presentations by the participants (5 min per presentation + discussion)
<i>afternoon</i>	Scientific Project Design	Writing Literature Reviews	Tools & Informational Resources in Science	
	Good Scientific Conduct	Discussion of Abstracts written by Participants	<i>Time to individually prepare for oral presentations</i>	

■ General events & discussions

■ Lectures on theoretical backgrounds

■ Practical training with guidance from the lecturers and feedback from the co-participants

Course Week 2 (May 9-11)

	Mon (May 9)	Tue (May 10)	Wed (May 11)
<i>morning</i>	Welcome & Discussion of Literature Reviews written by Participants	Application Writing (for a job, position, or scholarship)	Practical Interview Training (Simulation of an Interview Situation)
		Preparing for an Interview (for a job, position, or scholarship)	
<i>afternoon</i>	Grant Proposal Writing	Networking in Science	Study & Research Opportunities Abroad
	National & International Funding Opportunities	<i>Time to individually prepare for Interview Training</i>	Final Discussion, Evaluation & Farewell

Scientific Project Design

Already at the MSc or PhD level, students are expected to participate in the conceptualisation of their thesis projects and the experimental procedures. It is important to plan well in advance in order to not regret non-acquired data, inadequately treated samples or flawed experiment setups when analysing the results at the end of the project. At more advanced career levels, planning projects and experiments for an entire research group or even consortium makes up for a significant part of a scientists' life. *MSTCareer* provides the basic concepts and strategies.

Training elements:

- How to develop hypotheses and research questions
- How to define parameters to test hypotheses
- How to design an experimental setup
- How to plan the data and sample collection for a successful statistical analysis

Good Scientific Conduct

Contributing data to the ever growing pool of knowledge created by science entails a great amount of responsibility. A successful scientific career can quickly come to an end if this is ignored and, because of scientific misconduct, the reputation of a researcher is damaged. Therefore, all prospective researchers should be aware of this responsibility. *MSTCareer* gives an overview over the basic of good scientific conduct.

Training elements:

- Data management
- Publishing results / authorship
- Plagiarism

Scientific Reading & Writing / Writing Literature Reviews

The catch phrase "Publish or Perish" has as much validity as ever in the minds of scientists everywhere. The scientific community has long emphasized quantity and quality of scholarly publications as a way to judge the eminence of scientists. Granting agencies appear to do the same. Obviously, it is important – in addition to being a good researcher – to be a good (scientific) writer to allow for a successful career in natural & life sciences. *MSTCareer*, therefore, introduces the basics of Scientific Writing at an international level and individually discusses the purpose of each of the sections of a scientific article, this way providing 'tips & tricks' for the formulation of intelligible manuscripts. Next to Scientific *Writing* the lecture addresses the importance of Scientific *Reading* and gives advice on how to efficiently tackle complex articles as well as on how to access and manage scientific literature.

Scientific Presentation Skills

Even if the data is sound, being able to *present* results and experimental methodologies of a research project in an intelligible, comprehensive and convincing manner is prerequisite to winning over an audience and to successfully establishing oneself in the international scientific community. MSTCareer gives the theoretical background for powerful, authentic scientific presentations. Through practical training elements the participants gain experience in applying their presentation skills, receiving direct feedback from their co-participants and the tutors.

Training elements:

- *How to present a scientific poster*
 - theoretical background
- *How to give a conference talk*
 - theoretical background
 - practical training: designing a PowerPoint presentation; the do's and don'ts in an oral presentation; giving a presentation in front of the other course participants (with feedback from the lecturers and the co-participants)
- *Optional: Video recording of the oral presentations for self-assessment*

Tools & Informational Resources in Science

Nowadays, thanks to the internet, a plethora of tools and resources is available to scientists. MSTCareer gives an overview and additionally presents software programmes commonly used by researchers to manage their literature data.

Training elements:

- Social networking in science
- Scientific MailingLists & Blogs
- MOOC – Free Online Lectures from renowned universities and famous professors
- Conference databases
- ...

Grant Proposal Writing

This MSTCareer Module deals with strategies for writing convincing proposals to successfully acquire research funding. The participants gain insights into the proposal reviewing and the grant awarding processes and learn to focus on “messages” that have to be conveyed for a grant application to be convincing.

National & International Funding Opportunities

Knowledge about funding is essential to bring good research ideas to life. MSTCareer provides an overview of Indonesian research funding agencies and grant schemes and highlights a number of international organizations relevant to Indonesian scientists.

Application Writing & Interview Training (for jobs, positions & scholarships)

How to convince a potential employer, scientific supervisor or funding organisation that you are the ideal candidate to conduct a scientific project? MSTCareer gives answers to this by informing about concepts and strategies of writing successful applications.

Training elements:

- *How to write an application*
 - theoretical background
- *Job Interview training*
 - strategies for job interviews
 - individual training of a simulated interview situation (with feedback from the tutors and the co-participants)

Networking in Science

Modern marine science typically is based on interdisciplinary approaches and good collaborations are essential to achieve significant research findings beyond the individual scope. To gain access to attractive jobs and higher-ranking positions, good contacts to the right people are oftentimes more than just instrumental. So a successful career in marine science is very much based on good networking. MSTCareer outlines ways to approach networking strategically – both when attending conferences and through strengthening your career prospects by joining relevant professional organizations.

Study & Research Opportunities Abroad

Internationality is fundamental to a successful career in most natural & life science disciplines. A research stay abroad in a country with state-of-the-art research facilities and internationally renowned expertise can boost the career prospects of a young researcher. MSTCareer gives insights into academic systems outside Indonesia and advice on how to get one's foot in the door of academic institutions abroad.

Training elements

- Introduction to the science systems abroad
- How to find a host institute/supervisor abroad
- How to get a scholarship/position

About the MSTCareer Course Instructors



Professor Dr. Indra Jaya obtained his PhD in the field of Marine Studies (Ocean Acoustics) from the University of Delaware, USA, in 1996. Since completion of his education he has conducted several research projects and developed a network of research and education among his peers in marine science, both at the national and international level. He has been awarded research grants from various sources and has published papers in the national as well as international journals. Together with his research collaborators he has registered and applied for 8 (eight) patents.

Seven of his research innovations were awarded by the Indonesian Ministry of Research, Technology and Higher Education (KEMENRISTEKDIKTI) as the most prospective innovation in 2008, 2009, 2011, and 2012.

During his tenure as an academic staff member at the Faculty of Fisheries and Marine Sciences IPB, Bogor, he has served as Vice Dean for Collaboration and Development, Vice Dean for Academic Affairs, and Dean of the Faculty of Fisheries and Marine Sciences (2007-2015). He has actively participated in the Leaders of Indonesian Higher Education Forum for Fisheries and Marine Sciences as President of the Indonesian Association of Oceanology. Outside of the academic sphere, he has served as an expert and resource person for the Indonesian House of Representative (DPR) Commission IV that oversees fisheries and marine affairs. His main research interests are in the fields of ocean acoustics, instrumentation, ocean observation systems, and fish stock assessment using acoustics methods



Dr. Carsten Thoms is *DAAD Longterm Lecturer* in Marine Sciences at the Bogor Agricultural University (IPB). He is involved in teaching, research and international science networking at IPB as well as in activities of the German Academic Exchange Service (DAAD). The latter include his participation in selection boards for DAAD scholarships.

Dr. Thoms is Marine Biologist by training and has conducted research projects in numerous international contexts (in Europe, USA and Asia). For his postdoctoral research he was awarded with a prestigious Feodor Lynen Fellowship by the Alexander von Humboldt Foundation. Prior to his work in Indonesia, Dr. Thoms was the Scientific Manager of the German Graduate School of Excellence 'Jena School for Microbial Communication – JSMC' (www.jsmc.uni-jena.de) – a multidisciplinary research & research training network based at the University of Jena, Germany. Holding this position, he was responsible for establishing a research and career training program for over 250 young scientists, which developed into a crystallization point also for major German research consortia. Among other accomplishments, he conceptualized and organized the recruitment of candidates for the prestigious JSMC Fellowship Program. In this context, he was involved in the selection of doctoral researchers and junior research group leaders from a total of nearly 10,000 applicants from more than 100 countries.

Dr. Thoms is fascinated by the internationality of science and strives to promote young researchers to advance their career skills in order to become internationally competitive scientists.

Visit www.carsten-thoms.net for more information.



Dr. Hawis Madduppa is *Head of the 'Marine Biodiversity & Biosystematics Lab'* at the Faculty of Fisheries & Marine Sciences, Bogor Agricultural University (IPB). In addition, he has responsibilities as the *Secretary of the IPB Department of Marine Science & Technology*. He earned his PhD at the University of Bremen, Germany, funded with a research scholarship by the German Academic Exchange Service (DAAD). His research interests include the ecology and biology of marine fishes, population genetics, and fishes as bioindicator species. He is strongly involved in current approaches to catalog Indonesia's marine biodiversity with molecular phylogenetic techniques (e.g. DNA Barcoding).

Dr. Madduppa has an extensive personal network that includes marine scientists across the Indonesian archipelago as well as researchers abroad. He frequently gets invited as speaker to national and international symposia and to advise Indonesian governmental boards on marine conservation issues. As the Secretary of the Department of Marine Science & Technology he is involved in manifold administrative tasks in the academic context, including the chairing of examination boards and the organization of national and international events (e.g. 'International Conference on Marine Science (ICMS 2013)'; Constituting Workshop of the 'EMBRIO - Enhancing Marine Biodiversity Research in IndQnesia' Initiative 2014).

Dr. Madduppa has already supervised a number of student theses and organizes the international 2-month 'Marine Science & Technology (MST) Course' that is annually held at IPB since 2001. He is eager to share his experiences with Indonesian students to support them in their endeavors to strengthen Marine Biodiversity Research in Indonesia.

Visit <http://hawis.staff.ipb.ac.id/> for more information.