

# Scientific Program

## Oral Session

Monday, 14<sup>th</sup> July

Conference Room: Samphao Grand Ballroom

- 08:30            **Opening Ceremony** – Opening Speech by Governor of Pattaya City  
Conference Address by Chairperson of the Local Organizing Committee:  
                  **Professor Dr. La-orsri Sanoamuang**  
Welcome Address by the President of Khon Kaen University  
                  **Professor Dr. Sumon Sakonchai**  
Welcome Address by the President of Algal and Plankton Society of Thailand:  
                  **Professor Kanjanapaj Lewmanomont**  
Message from President of World Association of Copepodologists  
                  **Professor Dr. Shin-Ichi Uye**

### Symposium I-1: Genomics and Copepods

**Chairperson: Grace A. Wyngaard** (James Madison University, Harrisonburg, USA)

- 09:00            Introduction  
09:10            **Ben F. Koop** (University of Victoria, Victoria, Canada)  
                  Advancing genomics technologies in copepods (AGTC): lice and salmon  
09:50            **Jeffrey L. Boore** (Genome Project Solutions, Hercules, USA)  
                  The *Daphnia* genome and you – will your favorite genome be sequenced?  
  
10:30 – 11:00    **Coffee Break**  
  
11:00            **James E. Bron** and S.C. Johnson (University of Stirling, Stirling, UK)  
                  Copepod genomics – what can it do for me?  
11:40            **Ryuji J. Machida** (University of Tokyo, Tokyo, Japan)  
                  Utility of mitochondrial DNA sequences for species identification and phylogenetic markers in copepods  
  
12:20 – 13:30    **Lunch and Poster Sessions**

Conference Room: Samphao A

### Oral Session I-1: Parasitic Copepods

**Chairperson: Geoff A. Boxshall** (The Natural History Museum, London, UK)

- 13:30            **Ju-shey Ho** (California State University, Long Beach, California, USA)  
                  *Caligus epidemicus* Hewitt : a pest in Asian aquaculture  
13:50            **Ione Madinabeitia**, S. Ohtsuka and K. Nagasawa (Hiroshima University, Hiroshima, Japan)  
                  Taxonomy and ecology of parasitic copepods on wild and cultured red sea bream *Pagrus major* in Japanese waters

- 14:10 **Sarah E. Barker**, I. Bricknell, K. Thompson and J. Bron (University of Stirling, Stirling, UK)  
The effect of secretory / excretory products of the parasite *Lernaeocera branchialis* (Copepoda: Pennellidae) on the immune response *in vitro* of its fish host *Gadus morhua*
- 14:30 **Susan M. Dippenaar** and Rowan C. van Tonder (University of Limpopo, Sovenga, South Africa)  
The spatial distribution of three copepod parasites on the gills of the tiger shark
- 14:50 – 15:20 **Coffee Break**

## Oral Session I-2: Parasitic Copepods

**Chairperson: Ju-shey Ho** (California State University, Long Beach, California, USA)

- 15:20 **Geoff A. Boxshall** (The Natural History Museum, London, UK)  
The repeated evolution of parasitism in copepods
- 15:40 **Campbell C. Pert**, A.J. Mordue and I.R. Bricknell (FRS Marine Laboratory, Aberdeen, UK)  
The settlement and fecundity of the salmon louse, *Lepeophtheirus salmonis* (Copepoda: Caligidae) on atypical hosts
- 16:00 **Marina B. Shedko** (Institute of Biology and Soil Science, Vladivostok, Russia)  
Copepods of genera *Salmincola* and *Basanistes* (Lernaeopodidae) infecting the salmonid fish from Russian Far East: fauna and peculiarities of distribution
- 16:20 **Campbell C. Pert**, R. Kilburn, P. Cook, U. McCarthy, K. Urquhart, S. McBeath, S. Weir, A. McBeath and I.R. Bricknell (FRS Marine Laboratory, Aberdeen, UK)  
Monitoring the infection pressure from sea lice on wild salmonids in a Scottish West Coast Sea Loch
- 16:40 **Christiane Eichner**, P. Frost, B. Dysvik, K. Malde, I. Jonassen, B. Kristiansen and F. Nilsen (University of Bergen, Bergen, Norway)  
Salmon louse (*Lepeophtheirus salmonis*) transcriptomes during post moulting maturation and egg production, an EST- microarray study
- 17:00 **Group Photo**

## Conference Room: Samphao B

### Oral Session II-1: Systematics, Phylogeny and Molecular Genetics

**Chairperson: Maria K. Holynska** (Museum and Institute of Zoology, Warszawa, Poland)

- 13:30 **Grace A. Wyngaard**, M. Holynska and J. Schulte (James Madison University, Harrisonburg, USA)  
Phylogenetic utility of combined molecules and morphology in the freshwater copepod *Mesocyclops* (Crustacea: Cyclopidae)
- 13:50 **Tatyana Y. Smykova**, N.G. Sheveleva, L.V. Sukhanova, S.V. Kirilchik and O.A. Timoshkin (Limnological SB RAS, Irkutsk, Russia)  
Molecular phylogeny of Lake Baikal Cyclopoida (Copepoda): preliminary reconstruction
- 14:10 **Rony Huys**, J. Mackenzie-Dodds and J. Llewellyn-Hughes (The Natural

History Museum, London, UK)

Cyclopoids in different guises: testing the validity of the copepod order  
Thaumatopsylloida using morphology and small subunit rDNA

14:30 **Jefferson T. Turner**, P.J. Milligan, E.A. Stahl and N.V. Schizas  
(University of Massachusetts Dartmouth, North Dartmouth, USA)  
Phylogeography of the copepod *Acartia hudsonica* in estuaries of the  
northeastern United States

14:50 – 15:20 **Coffee Break**

## Symposium II: Biology of *Tigriopus*

**Chairperson: Hans U. Dahms** (National Taiwan Ocean University, Keelung, Taiwan)

15:20 **Hans-Uwe Dahms** (National Taiwan Ocean University, Keelung, Taiwan)  
Review on *Tigriopus* research

15:45 **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
The copepod *Tigriopus*: a promising marine model organism for  
ecotoxicology and environmental genomics

16:10 **Christopher S. Willett** (University of North Carolina, Chapel Hill, USA)  
Using genetically divergent populations of the copepod *Tigriopus*  
*californicus* to study the genetic basis of reproductive isolation

16:35 **Christopher K. Ellison** and R.S. Burton (University of California, San  
Diego, USA)  
Allopatric differentiation and nuclear/mitochondrial genome interactions  
in the splash pool copepod *Tigriopus californicus*

17:00 **Group Photo**

## Tuesday, 15<sup>th</sup> July

### Conference Room: Samphao Grand Ballroom

#### Maxilliped Lecture

08:30 **Shin-Ichi Uye** (Hiroshima University, Hiroshima, Japan)  
Human forcing of the copepod-fish-jellyfish triangular trophic relationship

#### Special Lecture

09:30 **Koen Martens** (Royal Belgian Institute of Natural Sciences, Brussels,  
Belgium)  
How to prepare manuscripts to be published in *Hydrobiologia*

10:20 – 10:50 **Coffee Break**

## Symposium I-2: Genomics and Copepods

**Chairperson: Grace A. Wyngaard** (James Madison University, Harrisonburg, USA)

11:00 **Carol E. Lee** (University of Wisconsin, Madison, USA)  
Rapid evolution across independent invasions into novel environments

11:30 **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
Lesson from the copepods *Tigriopus japonicus* and *Paracyclops nana* in  
the genomics

12:00 **Christopher K. Ellison** and R.S. Burton (University of California San Diego, La Jolla, USA)  
Disruption of the mitochondrial regulatory network in interpopulation hybrids of *Tigriopus californicus*

12:30 – 13:30 **Lunch and Poster Sessions**

## Conference Room: Samphao A

### Oral Session III: Genomics and Copepods

**Chairperson: Grace A. Wyngaard** (James Madison University, Harrisonburg, USA)

13:30 **Guy Drouin** (University of Ottawa, Ottawa, Canada)  
Chromatin diminution in the freshwater copepod species *Mesocyclops edax*

14:00 **Dagmar Frisch** and L.J. Weider (University of Oklahoma, Kingston, USA)  
The exotic invasive cladoceran *Daphnia lumholtzi* – an example of the application of population genetic tools

14:30 General discussion of talks about Genomics and Copepods

14:50 – 15:20 **Coffee Break**

### Oral Session IV: Life Cycle Strategies of Copepods

**Chairperson: La-orsri Sanoamuang** (Khon Kaen University, Khon Kaen, Thailand)

15:20 **Ram Kumar**, T.R. Rao and J.S. Hwang (University of Delhi, New Delhi, India)

Postembryonic developmental rates and demographic parameters of *Pseudodiaptomus annandalei* as a function of salinity and temperature

15:40 **Martha J. Haro Garay** and L.H. Soberanis (CIBNOR, S.C. Fisheries Ecology Program, La Paz, México)

Copepods and water column structure during 1997 in the Strait of Georgia, Canada

16:00 **R. Ramanibai**, G. Priya and N.S. Bharathidevi (University of Madras, Chennai India)

Influence of physico-chemical factors on the life history of *Oithona brevicornis* and *Acrocalanus gracilis* from Muttukadu backwater, Chennai, Tamilnadu, India

16:20 **Samba Kâ**, M. Pagano, M. Bouvy and C. Cuoc (Université Cheikh Anta Diop, Dakar, Sénégal)

Effects of cyanobacteria on the zooplankton: population dynamics and anatomic modifications

16:40 **Koichi Ara** and J. Hiromi (Nihon University, Kanagawa, Japan)  
Trophodynamics in terms of carbon flow from primary to mesozooplankton production in Sagami Bay, Japan

17:00 **Erdem M. Karaköylü**, P.J.S. Franks, and Y. Tanaka (Scripps Institution of Oceanography, La Jolla, USA)

Planar laser-induced fluorescence imaging of copepod gut dynamics

17:20 **Guang-Xing Liu**, J.L. Cui and X.F. Chen (Ocean University of China, Qingdao, China)

Genetic analysis of calanoid copepod *Euchaeta plana* by ISSR technology

## Conference Room: Samphao B

### Oral Session V-1: Role of Copepods in Ecosystem

**Chairperson: Jefferson T. Turner** (University of Massachusetts Dartmouth, North Dartmouth, USA)

- 13:30 **Ksenia N. Kosobokova** (P.P. Shirshov Institute of Oceanology RAS, Moscow, Russia)  
Pelagic copepods of the Arctic Ocean: species inventory and comparison of fauna of the Nansen, Amundsen, Makarov and Canada Basins
- 13:50 **Shinji Shimode** and A. Tsuda (University of Tokyo, Tokyo, Japan)  
Vertical and horizontal distribution of *Neocalanus gracilis* from western North Pacific Ocean
- 14:10 **Hans-Juergen Hirche**, A. Wesche, K. Wiltshire and W. Greve (Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany)  
Internal and external controls of life cycles and production of coastal copepods - North Sea as example
- 14:30 **Rasmus Skern**, P. Frost, B.O. Kvamme, I. Sommerset and F. Nilsen (Institute of Marine Research, Bergen, Norway)  
Development or digestion? Identification of an intronless maternal transcript encoding a trypsin-like peptidase in developing eggs of salmon lice, *Lepeophtheirus salmonis* (Copepoda, Crustacea)
- 14:50 – 15:20 **Coffee Break**

### Oral Session V-2: Role of Copepods in Ecosystem

**Chairperson: Shin-Ichi Uye** (Hiroshima University, Hiroshima, Japan)

- 15:20 G.-T. Zhang and **Chong Kim Wong** (Chinese University of Hong Kong, Shatin, Hong Kong)  
Population dynamics and body size of *Calanus sinicus* in the subtropical coastal waters of Hong Kong
- 15:40 **Yuichiro Nishibe**, Y. Hirota and H. Ueda (University of Tokyo, Tokyo, Japan)  
Community structure and vertical distribution of oncaeid copepods in Tosa bay, southern Japan
- 16:00 **Hendrik L. Jerling** (University of Zululand, KwaDlangezwa, South Africa)  
Effects of local development projects on the distribution and abundance of two dominant calanoid copepod genera in estuaries of the Zululand coast, South Africa
- 16:20 **Shuhei Nishida** and T. Nonomura (University of Tokyo, Tokyo, Japan)  
Structure and function of caudal secretory glands in *Calanus* species
- 16:40 **Ryota Nakajima**, T. Yoshida, B.H.R. Othman and T. Toda (Soka University, Tokyo, Japan)  
Diel variation in abundance, biomass and production of copepod community in a coral reef water of Tioman Island, Malaysia
- 17:00 **Hamid Rezai**, F.M. Yusoff, A. Arshad, A. Kawamura, T. Toda and B.H.R. Othman (Iranian National Center for Oceanography, Tehran, Iran)

- 17:20 Vertical distribution of zooplankton and copepod community structure in the Straits of Malacca  
**Adelaide Rhodes** (University of Washington, Seattle, USA)  
 Investigating the “*copepod effect*” why are copepods an indispensable part of the marine food chain?

## Thursday, 17<sup>th</sup> July

### Conference Room: Samphao Grand Ballroom

#### Symposium III: A matter of life and death: causes and consequences of copepod mortality

- Chairperson: Kam Tang** (Virginia Institute of Marine Science, Gloucester Point, USA)
- 08:30 **Mark Ohman** (Scripps Institution of Oceanography, La Jolla, USA)  
 Estimating copepod mortality *in situ*: implications for population dynamics
- 09:00 **Alf Skovgaard** (University of Copenhagen, Copenhagen, Denmark)  
 Occurrence and effects of parasites in copepods
- 09:30 **Andrew Hirst** (University of London, London, UK)  
 Predatory control of adult sex ratios and longevity in pelagic copepods
- 10:00 – 10:30 **Coffee Break**
- 10:30 **Marja Koski** (Technical University of Denmark, Charlottenlund, Denmark)  
 Diet-induced mortality of copepods
- 11:00 **Hans G. Dam**, D.T. Avery, L. Chen, C. Senft, M. Finiguerra, H. Zhang and S. Lin (University of Connecticut, Groton, USA)  
 Phenotypic variation in copepod fitness and mortality
- 11:30 **Kam Tang** and R. Lopes (Virginia Institute of Marine Science, Gloucester Point, USA)  
 Occurrence and microbial decomposition of copepod carcasses in natural environments
- 12:00 **Guillaume Drillet**, E. Goetze, N.O.G. Jørgensen, P.M. Jepsen, J.K. Højgaard, B.W. Hansen and T. Kiørboe (Danish Institute for Fisheries Research, Charlottenlund, Denmark)  
 Differences in life history traits within various strain of the Calanoid copepod *Acartia tonsa* with focus on resting eggs production
- 12:30 – 13:30 **Lunch and Poster Sessions**

### Conference Room: Samphao A

#### Oral Session VI: Copepods in Special Habitats

- Chairperson: La-orsri Sanoamuang** (Khon Kaen University, Khon Kaen, Thailand)
- 13:30 **Anton Brancelj**, S. Watirotram and L. Sanoamuang (National Institute of Biology, Ljubljana, Slovenia)  
 The first record of a cave- dwelling Copepoda from Thailand – with a

- description of two new species
- 13:50 **Christoph Plum**, J. Zekely and P.M. Arbizu (Research Institute Senckenberg, Wilhelmshaven, Germany)  
The copepod community of an oil seep from the Gulf of Mexico (Green Canyon), and its relationship to other chemosynthetic habitats
- 14:10 **Jiang-Shiou Hwang** and H.U. Dahms (National Taiwan Ocean University, Keelung, Taiwan)  
Do hydrothermal vents affect planktonic copepods? A case study from Turtle Island, Taiwan
- 14:30 **Paulo H. Corgosinho** and P. Martínez Arbizu (Senckenberg Forschungsinstitut, Wilhelmshaven, Germany)  
Copepoda Parastenocarididae from the Neotropical region
- 14:50 – 15:20 **Coffee Break**

### Oral Session VII: Diversity of Copepods

**Chairperson: Ladda Wongrat** (Kasetsart University, Bangkok, Thailand)

- 15:20 **Elena L. Markhaseva** (Russian Academy of Sciences, St. Petersburg, Russia)  
Diversity of Clausocalanoidea (Copepoda, Calanoida) from deep near-bottom of the World Ocean
- 15:40 **Ruth Böttger-Schnack** and R. Machida (IFM-GEOMAR, Kiel, Germany)  
Species identification of the microcopepod family Oncaeidae in the Mediterranean Sea using morphological and molecular criteria
- 16:00 J. Sugumaran, M.S. Naveed and **Kareem Altaff** (The New College, Chennai, India)  
Diversity of meiofaunal harpacticoids of Chennai Coast, India
- 16:20 **Mary Mar P. Noblezada**, W.L. Campos, P.D. Beldia II, G.E. Genito, K. A. Villarta and D.M.G. Estremadura (University of the Philippines in the Visayas, Iloilo, Philippines)  
Comparison of zooplankton composition, abundance and distribution in four focal areas in the Philippines: additive biological indices for establishing marine protected areas
- 16:40 – 17:40 **WAC Business Meeting**

### Conference Room: Samphao B

### Oral Session VIII: Distribution of Copepods

**Chairperson: Supawadee Chullasorn** (Ramkhamhaeng University, Bangkok, Thailand)

- 13:30 **Benni W. Hansen** and M.H. Sichelau (Roskilde University, Roskilde, Denmark)  
Distribution patterns of calanoid copepod diapause eggs in Danish waters – sediment characteristics matters
- 13:50 **Gopikrishna Mantha** and S. Besiktepe (The New College, Chennai, India)  
Distribution of cyclopoid copepods in the Cilician Basin, Northeastern Mediterranean Sea, Turkey
- 14:10 **Pei-Kai Hsu** (National Sun Yat-Sen University, Kaohsiung, Taiwan)

- The small-scale vertical distribution patterns of copepods in a tropical lagoon in Taiwan
- 14:30 **Cristy S. Acabado**, W.L. Campos, M.M.P. Noblezada and D.M.G. Estremadura (University of the Philippines in the Visayas, Iloilo, Philippines)  
Vertical distribution of zooplankton in an upwelling area off the Zamboanga Peninsula in the East Sulu Sea, Philippines
- 14:50 – 15:20 **Coffee Break**

### Oral Session IX: Benthic Copepods

**Chairperson: Jae-Seong Lee** (Hanyang University, Seoul, Korea)

- 15:20 **Janet W. Reid** (Virginia Museum of Natural History, Martinsville, U.S.A.)  
Distributions and biogeographical relationships of species of *Bryocamptus* (Copepoda: Harpacticoida) in Virginia, U.S.A.
- 15:40 **Suzanne Edmands** (University of Southern California, Los Angeles, USA)  
Mapping the genetics of speciation in *Tigriopus californicus*
- 16:00 **Wonchoel Lee**, J. Kong, P.H. Lenz and D.K. Hartline (Hanyang University, Seoul, Korea)  
Adaptation of harpacticoid nervous systems to differing life styles
- 16:20 **Kanghyun Lee** and W. Lee (Hanyang University, Seoul, Korea)  
Effect of mid-ultraviolet (UVB) radiation on the morphological deformity in *Tigriopus japonicus* s. l. (Harpacticoida: Harpacticidae)
- 16:40 – 17:40 **WAC Business Meeting**

### Conference Room: Nil Room

**Genomics and Copepods Workshop Discussions** - All attendees of the WAC meeting are invited to participate

- 10:00 – 16:00 Small group discussions

## Friday, 18<sup>th</sup> July

### Conference Room: Samphao Grand Ballroom

#### Symposium IV: The use of cyclopoid copepods for biological control of larval disease-bearing mosquitoes

**Chairperson: Janet W. Reid** (Virginia Museum of Natural History, Martinsville, USA)

- 08:30 Introduction
- 08:40 **Vu S. Nam**, N.T. Yen, T.V. Phong, T.C. Tu, L.L. Loan, L.H.K. Khanh, V.T. Thang, S.C. Kutcher, J.A. Jeffery, B.H. Kay and P.A. Ryan (Vietnam Administration of Preventive Medicine, Hanoi, Vietnam)  
Using *Mesocyclops* as a biological control agent in community based dengue control programs in rural areas in Vietnam – a continuing success

- story
- 09:20 **Simon C. Kutcher**, V.S. Nam, N.T. Yen, T.C. Tu, L.L. Loan, L.H.K. Khanh, V.T. Thang, J.A. Jeffery, B.H. Kay, P.A. Ryan (Australian Foundation for the Peoples of Asia and the Pacific Ltd., Ho Chi Minh City, Vietnam)  
Extending research into action – partnerships in dengue control through *Mesocyclops*-based community projects in Vietnam
- 10:00 **Pattamaporn Kittavapong**, U. Chansang, P. Kosiyachinda and A. Bhumiratana (Mahidol University, Bangkok, Thailand)  
A better approach to use copepods in biological control of mosquito vectors
- 10:30 – 11:00 **Coffee Break**

## Oral Session II-2: Systematics, Phylogeny and Molecular Genetics

**Chairperson: Hans-Uwe Dahms** (National Taiwan Ocean University, Keelung, Taiwan)

- 10:50 **Janet M. Bradford-Grieve** (National Institute of Water and Atmospheric Research, Wellington, New Zealand)  
Interim cladistic analysis of calanoid copepod families based on morphological characters
- 11:10 **Erica Goetze** (University of Hawaii at Manoa, Honolulu, USA)  
Molecular species discovery and pelagic biogeography in planktonic copepods
- 11:30 **Sheikh Raisuddin**, K.W. Lee, J.S. Rhee and J.S. Lee (Hamdard University, New Delhi, India)  
Stressor-induced expression of corticotropin-releasing hormone binding protein (*CRH-BP*) gene in the intertidal copepod, *Tigriopus japonicus*
- 11:50 J.S. Ki, D.S. Hwang, K.W. Lee, H.G. Park and **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
The complete mitochondrial genome of cyclopoid copepod *Paracyclopsina nana*: sequence and genomic structure
- 12:10 **Maria K. Holynska** (Museum and Institute of Zoology, Warszawa, Poland)  
Latitudinal gradients in diversity of the freshwater copepod family, Cyclopidae
- 12:30 – 13:30 **Lunch and Poster Sessions**

## Conference Room: Samphao A

### Oral Session X: Copepod Feeding

**Chairperson: Ram Kumar** (University of Delhi, New Delhi, India)

- 13:30 **Michal Šorf** and Z. Brandl (University of South Bohemia, České Budějovice, Czech Republic)  
Rotifer compound in a diet of calanoid copepods: the effect of omnivorous feeding on survival and reproduction of *Eudiaptomus gracilis* (Copepoda: Calanoida)
- 13:50 **Gabriela M. Esqueda-Escárcega**, G. Aceves-Medina, S. Hernández-Trujillo, J.R. Hernández-Alfonso, S.F. Jiménez and R. Pacheco-Chávez (IPN-CICIMAR, La Paz, Mexico)



14:30 **Vasiliki Kalogeropoulou**, A.J. Gooday, N. Lampadariou, P. Martinez Arbizu and A. Vanreusel (Hellenic Centre of Marine Research, Heraclion Crete, Greece)  
Temporal changes (1989-1999), in deep sea metazoan meiofaunal assemblages with emphasis to Harpacticoid copepods, at the Porcupine Abyssal Plain, NE Atlantic

14:50 – 15:20 **Coffee Break**

### Oral Session IX-3: Benthic Copepods

**Chairperson: Rony Huys** (The Natural History Museum, London, UK)

15:20 **Hendrik Gheerardyn**, M. De Troch, S.G.M. Ndaró, M. Raes, M. Vincx and A. Vanreusel (Ghent University, Gent, Belgium)

Community structure and microhabitat preferences of harpacticoid copepods in a tropical reef lagoon (Zanzibar, Tanzania)

15:40 **Christina Folkers**, P. Martinez-Arbizu and K.H. George (Research Institute Senckenberg DZMB, Wilhelmshaven, Germany)

Community Analysis of sublittoral Harpacticoida (Copepoda, Crustacea) in the Western Baltic Sea

16:00 **Lena Menzel** and K.H. George (Research Institute Senckenberg DZMB, Wilhelmshaven, Germany)

Do geographically separated deep-sea basins in the South Atlantic have a different harpacticoid fauna? – results from the expeditions DIVA 1 (M48/1) and DIVA 2 (M63/2)

16:20 **Motohiro Shimanaga** (Kumamoto university, Kumamoto, Japan)

Effects of burrows of Ocypodidae crabs on meiofaunal distributions in sediments of a tidal flat – Do the crabs promote benthic copepods?

16:40 **Shinsuke Saito** and N. Iwasaki (Kochi University, Tosa, Japan)

Life history and host specificity of harpacticoid copepod *Idomene* sp. (Thalestridae) associated with a compound ascidian *Aplidium yamazii*

### Conference Room: Nil Room

**Genomics and Copepods Workshop Discussions** - All attendees of the WAC meeting are invited to participate

10:00 – 16:00 Small working groups begin drafting parts of the white paper, which will serve as the basis for a manuscript to be submitted to a peer-reviewed journal and to be included in report sent to National Science Foundation.

## Poster Sessions

### PS-I: Parasitic and Symbiotic Copepods

001 **Yu-Rong Cheng** and C.F. Dai (National Taiwan University, Taipei, Taiwan)  
The infection of parasitic xarifiids (Copepoda) during the bleaching of *Pocillopora damicornis*

002 **Daisuke Uyeno**, S. Ohtsuka and K. Nagasawa (Hiroshima University, Hiroshima, Japan)  
Diversity of parasitic copepods in tetraodontiform fishes

- 003 **Eduardo Suárez-Morales** and A.M. Santana-Piñeros (El Colegio de la Frontera Sur, Chetumal, Mexico)  
A new species of *Ergasilus* (Copepoda: Cyclopoida: Ergasilidae) from a coastal lagoon system of the Mexican Pacific
- 004 **Anastasiya V. Zykova**, V.N. Ivanenko and T.A. Britaev (Moscow State University, Moscow, Russia)  
Symbiotic crustaceans in diet of three species of coral fishes associated with *Acropora sp.*, Southern Vietnam
- 005 **Wei-Cheng Liu**, C.L. Lin and J.S. Ho (National Chiayi University, Chiayi, Taiwan)  
Lernanthropid copepods parasitic on marine fishes of Taiwan
- 006 **B.A. Venmathi Maran**, S. Ohtsuka, L.T. Seng and K. Nagasawa (Hiroshima University, Hiroshima, Japan)  
Newly discovered *Caligus* spp. from cultured fishes in Malaysia
- 007 **Ching- Long Lin** and J.H. Ho (National Chiayi University, Chiayi, Taiwan)  
A new species of *Bomolochus* Claus, 1864 (Copepoda: Bomolochidae) parasitic on gill of the fish, *Brama japonica* Hilgendorf, 1878, of Taiwan
- 008 **Aleksandra S. Savchenko**, V.N. Ivanenko, T.A. Britayev (Moscow State University, Moscow, Russia)  
Copepoda associated with shallow water starfishes (Asteroidea) at the Southern Vietnam
- 009 **Kazuva Nagasawa**, A. Inoue and T. Umino (Hiroshima University, Hiroshima, Japan)  
Host and environmental factors affecting the occurrence of *Neoergasilus japonicus*, a copepod parasite of freshwater fish, in a river, Japan
- 010 **Midori Obe**, A. Taga, T. Umino, and K. Nagasawa (Hiroshima University, Hiroshima, Japan)  
Infection with *Neoergasilus japonicus* (Copepoda: Ergasilidae) on bluegill *Lepomis macrochirus*, a freshwater fish of North American origin, in Japan
- 011 H. Itoh and **Shuhei Nishida** (University of Tokyo, Tokyo, Japan)  
The biology of *Hemicyclops* (Copepoda: Poecilostomatoida) associated with benthic invertebrates
- 012 **Binh Thi Tran**, H.V. Nguyen and D.V. Nguyen (Vietnamese Academy of Science and Technology, Hanoi, Vietnam)  
Study on copepode parasite of freshwater fishes in Babe Lake, north of Vietnam
- 013 **Julianne E. Kalman** and D. Tang (Cabrilla Marine Aquarium, San Pedro, U.S.A.)  
Discovery of the enigmatic parasitic copepod *Acanthochondria cyclopsetta* Pearse, 1952 (Cyclopoida, Chondracanthidae) on an eastern Pacific flatfish, *Xystreureys liolepis* Jordan and Gilbert
- 014 **Vladislav I. Monchenko** (Schmalhausen Institute of Zoology NASU, Kyiv, Ukraine)  
Parasitic trend in evolution of the family Cyclopidae (Cyclopoida)
- 015 **Sarah E. Barker**, I. Bricknell, K. Thompson and J. Bron (University of Stirling, Stirling, Scotland)  
Cephalothoracic glandular structures of the female parasite *Lernaecera branchialis* (Copepoda) pre- and post- metamorphosis
- 016 **Hidekatsu Suzuki** (Ishinomaki Senshu University, Ishinomaki, Japan)  
Infection of *Pectenophilus ornatus* (Copepoda) on the Japanese scallop (*Patinopecten yessoensis*) in Onagawa Bay, Miyagi prefecture Japan
- 017 **Giuseppe Alfonso** and G. Belmonte (University of Salento, Lecce, Italy)  
First record of the parasite copepod *Neoergasilus* in Italy

## PS II: Systematics, Phylogeny and Molecular Genetics

- 018 **Daniel Previattelli**, G. Boxshall and E.N. dos Santos-Silva (Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil)  
Origin, function and homology of different structures within the Diaptomidae, and their informative potential for phylogenetic analysis
- 019 **Khunnaphat Nakhonchom** and L. Sanoamuang (Surindra Rajabhat University, Surin, Thailand)  
Analysis of some diaptomid copepods (Calanoida, Copepoda) in Thailand, based on partial 18S rDNA sequence
- 020 V. Monchenko and **Larvsa Samchyshvna** (Schmalhausen Institute of Zoology NASU, Kyiv, Ukraine)  
Application of the concept of crossed populations in Cyclopoida in practice of taxonomic investigations in nature
- 021 K.W. Lee, D.S. Hwang, S. Raisuddin and **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
Molecular cloning, phylogenetic analysis and developmental expression of a vitellogenin (*Vg*) gene from the intertidal copepod, *Tigriopus japonicus*
- 022 K.W. Lee, S. Raisuddin, D.S. Hwang and **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
Glutathione *S*-transferase-Sigma (*GSTS*) is a potential biomarker of trace metal exposure in the intertidal copepod *Tigriopus japonicus*
- 023 J.S. Rhee, S. Raisuddin and **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
Heat shock protein (*Hsp*) gene responses of the intertidal copepod *Tigriopus japonicus* to environmental toxicants
- 024 **Seunghan Lee**, H.Y. Soh, J. Kong, P.H. Lenz and W. Lee (Hanyang University, Seoul, Korea)  
Morphological and molecular comparisons between two remotely distributed populations of *Parvocalanus crassirostris* (Calanoida; Paracalanidae)
- 025 **Kichoon Kim**, B.W. Kim and W. Lee (Hanyang University, Seoul, Korea)  
A new species of *Sentiropsis* (Copepoda: Harpacticoida: Paranannopidae) from the subtidal zone, Hyeopjae beach, Jeju Island, Korea
- 026 **Claudia Halsband-Lenk**, K. Eiane and T. Kiørboe (The University Centre in Svalbard, Longyearbyen, Norway)  
Variability patterns in body size within and between boreal and arctic *Acartia* populations: implications for microevolution processes
- 027 **Martha Angélica Gutiérrez-Aguirre**, M. Elías-Gutiérrez, and A. Cervantes-Martínez (Universidad de Quintana Roo, Cozumel Quintana Roo, Mexico)  
Genetic and morphological variation into *Mastigodiatomus albuquerquensis* (Herrick, 1895) (Calanoida: Diaptomidae) populations from North and Central Mexico
- 028 **Elena Zotkevich**, V. Trifonov, A. Grishanin, T. Boikova, N. Sheveleva and I. Zhimulev (Siberian Branch of Russian Academy of Sciences, Novosibirsk, Russia)  
The study of DNA from the eliminated granules in two populations of *Cyclops kolensis*
- 029 **Rasmus Skern-Mauritzen** and A. Osland (Institute of Marine Research, Bergen, Norway)  
Evaluating quantitative real time PCR as a tool in zooplankton quantification and species determination
- 030 A.S. Jozefczuk-Kuczynska and **Maria I. Zmijewska** (University of Gdansk, Gdynia, Poland)  
Molecular population genetic of *Acartia tonsa* from the Baltic Sea
- 031 **Adelaide Rhodes** (University of Washington, Seattle, USA)

Genomic approach to investigating lipid desaturase and elongase pathways in marine copepods

- 032 **Ludmila Stepanova** (Russian Academy of Sciences, St.-Petersburg, Russia)  
Relationship between the morphological structure of male right antennule and the female morphological characters in the family Diaptomidae (Copepoda, Calaniformes)

### PS III: Diversity and Biogeography of Copepods

- 033 **Eduardo Suárez-Morales**, F. Ramírez, R. Gasca and C. Derisio (El Colegio de la Frontera Sur, Chetumal, Mexico)  
Report on some Monstrilloida (Crustacea: Copepoda) from the Beagle Channel, South America, with description of two new species
- 034 **Mohsen M. El-Sherbiny** and H. Ueda (Suez Canal University, Ismailia, Egypt)  
Unknown species of the pontellid copepod genus *Labidocera* (Crustacea) collected from the northern Red Sea
- 035 **Larysa Samchyshyna** (Schmalhausen Institute of Zoology NASU, Kyiv, Ukraine)  
Zoogeographical features of freshwater and brackish calanoid copepods of Ukraine
- 036 **Natthawadee Phukham**, J. Teeramaethee and S. Patarajinda (Kasetsart University, Bangkok, Thailand)  
Diversity of marine calanoid copepods (Family Pontellidae) in Myanmar and Thai waters of Andaman Sea
- 037 **Shinnichi Saito**, Y. Miyamoto, H. Tamate and H. Suzuki (Yamagata University, Yamagata, Japan)  
Species diversity of pelagic copepods in the marine lakes of Palau
- 038 **Sakiko Sakaguchi**, H.Ueda, S. Ohtsuka, H.Y. Soh, Y.H.Yoon and M. Tanaka (Kochi University, Kochi, Japan)  
Brackish-water calanoid copepod faunas in western Japan in comparison with those in neighboring Korean waters
- 039 **Hendrik Gheerardyn** and G. Veit-Köhler (Ghent University, Ghent, Belgium)  
Diversity and large-scale biogeography of Paramesochridae (Copepoda, Harpacticoida) in South Atlantic and Antarctic abyssal plains
- 040 **Lai Peng Foong**, N. Tuseran, V.K. Lim, T. Toda and B.H.R. Othman (Universiti Kebangsaan Malaysia, Bangi, Malaysia)  
The abundances and diversity on *Scambicornus* (Copepoda, Cyclopoida) associated with holothuria in Peninsular Malaysia
- 041 **Seong Yong Moon**, W. Lee and H.Y. Soh (Chonnam National University, Jeonnam, Korea)  
A new species of *Bestiolina* Andronov, 1991 (Calanoida, Paracalanidae) in estuarine and coastal waters, Korea, with notes on its occurrence patterns
- 042 **Marianne Wootton** and M. Edwards (Sir Alister Hardy Foundation for Ocean Science, Plymouth, UK)  
Life at a species biogeographical edge: macro-scale sensitivity of a copepod species to climate change
- 043 **Inta Deimantovica** (University of Latvia, Riga, Latvia)  
Records of the species *Limnocalanus macrurus* in Latvia
- 044 **Jung-Hoon Kang**, M. Chang and H.Y. Soh (Korea Ocean Research & Development Institute / South Sea Institute, Kyungnam, Republic of Korea)  
Occurrence of a copepod *Acartia hongii* beyond their bio-geographical range in the southern coastal waters of Korea
- 045 **Hyeon Gyeong Jeong**, H.Y. Soh, and H.L. Suh (Chonnam National University, Gwangju, Republic of Korea)  
A new species of *Labidocera* (Copepoda, Pontellidae) in the South Sea of Korea,

- with redescription of the closely related species *L. rotunda*
- 046 **Hyeon Gyeong Jeong**, H.Y. Soh, H.L. Suh, S.B. Jeong and Y.H. Yoon (Chonnam National University, Gwangju, Republic of Korea)  
*Labidocera* species (Copepoda, Pontellidae) in the adjacent waters of the Tsushima Warm Current, with notes on their zoogeography
- 047 **Min-Chul Jang**, K.S. Shin, P.G. Jang and B.G. Hyun and D.H. Shon (Korea Ocean Research and Development Institute, Geoje, Republic of Korea)  
Composition of Copepoda in ballast water of ships entering Korea, Part I : Pusan and Ulsan harbors
- 048 **Ok-Myung Hwang**, M.C. Jang, K.S. Shin, D.H. Shon and W.J. Lee (Korea Ocean Research and Development Institute, Geoje, Republic of Korea)  
Composition of Copepoda in ballast water of ships entered Korea, Part II: Kwangyang and Incheon harbors
- 049 **Sophie Conroy-Dalton** (The Natural History Museum, London, UK)  
Biodiversity of sandy beach Copepoda from Mozambique and its neighbouring coastal countries: TRANSMAP project
- 050 S.H. Hsiao, **Jiang-Shiou Hwang** and T.H. Fang (National Taiwan Ocean University, Keelung, Taiwan)  
Copepod species compositions and body contents of trace metals in the waters of northern Taiwan

#### PS IV: Benthic Copepods

- 051 **Samuel Gómez** (Universidad Nacional Autónoma de México, Mazatlán, México)  
On some species of *Cletocamptus* Schrankewitsch, 1875 (Copepoda: Harpacticoida) from Argentina
- 052 **Elena Fefilova** (Institute of Biology Komi Scientific Center, Syktyvkar, Russia)  
Harpacticoid fauna in the North-East of Europe
- 053 **Yue Lou**, J.W. Back, W. Lee and J.H. Baily-Brock (Hanyang University, Seoul, Korea)  
Community structure of meiofauna - Harpacticoid diversity in the sandy beaches of Oahu, Hawaii in September 2007
- 054 **Jin Wook Back**, Rony Huys and Wonchoel Lee (Hanyang University, Seoul, Korea)  
A new genus (Copepoda: Harpacticoida: Laophontidae) from the subtidal zone, Hyeopjae beach, Jeju Island, Korea
- 055 **Dong Ju Lee** and W. Lee (Hanyang University, Seoul, Korea)  
A new species of the genus *Maraenobiotus* (Copepoda: Harpacticoida: Canthocamptidae) from Mount Wolchul, Korea
- 056 **Jin Wook Back**, H.J. Moon and W. Lee (Hanyang University, Seoul, Korea)  
A new species of *Paramesochra* T. Scott, 1892 (Copepoda, Harpacticoida, Paramesochridae) from the coast of Yellow Sea, Korea
- 057 **Kanghyun Lee**, K. Kim and W. Lee (Hanyang University, Seoul, Korea)  
Effect of mid-ultraviolet (UVB) radiation on the mortality in *Tigriopus japonicus* s. l. (Harpacticoida: Harpacticidae)
- 058 **Minjae Kim** and W. Lee (Hanyang University, Seoul, Korea)  
Morphological, molecular and reproductive characteristics of *Tigriopus* species from Korea with a definition of two new species
- 059 **Jung Ho Hong**, K. Lee and W. Lee (Hanyang University, Seoul, Korea)  
A checklist of the harpacticoid copepods in the Arctic
- 060 **Terue C. Kihara**, T. Björnberg, G. Lotufo and C.E.F. da Rocha (Universidade de São Paulo, São Paulo, Brazil)  
Tetragonicipitidae (Copepoda: Harpacticoida) from the coast of the State of São Paulo, Brazil

- 061 V.R. Alekseev, **Elena Fefilova** and F. Yousof (Ural Division of Russian Academy of Sciences, Syktyvkar, 167982, Russia)  
Biodiversity of continental Harpacticoida in Malaysia
- 062 **Supawadee Chullasorn** (Ramkhamhaeng University, Bangkok, Thailand)  
A new species of *Scottolana* Por, 1967 (Copepoda: Harpacticoida: Canuellidae) from Kata sandy beach Phuket Island

## PS V: Role of Copepods in Ecosystem

- 063 **Pailin Jitchum** and Ladda Wongrat (Kasetsart University, Bangkok, Thailand)  
Community structure and abundance of epipelagic copepods in a shallow protected bay, the Gulf of Thailand
- 064 **Carlos Álvarez Silva** and María Guadalupe Miranda Arce (Universidad Autónoma Metropolitana, Iztapalapa, México)  
Planktonic copepods from Grande and Chica lagoons, Veracruz, Mexico
- 065 **Igor Stanković**, I. Ternjej, Z. Mihaljević, L. Furač and M. Kerovec (University of Zagreb, Zagreb, Croatia)  
Crustacean plankton community and their relation to abiotic parameters in gypsum karst lakes with focus on copepods (Crustacea, Copepoda)
- 066 **Ivančica Ternjej**, Z. Mihaljević, M. Kerovec and I. Stanković (University of Zagreb, Zagreb, Croatia)  
Copepods vs Cladocerans: long term changes in crustacean zooplankton community of the Butoniga reservoir (Croatia)
- 067 **Gregory W. Gelembiuk**, M. Posavi, B.P. Metzger, B.D. Eads and C.E. Lee (University of Wisconsin - Madison, U.S.A.)  
Targets of selection during a fundamental niche expansion
- 068 V. Monchenko, **Stalina Krazhan** and L. Samchyshyna (Schmalhausen Institute of Zoology NASU, Kyiv, Ukraine)  
Biomass and copepod taxocene from salt ponds of the Sivash Area (Ukraine, Crimea)
- 069 **Kwang-Hyeon Chang**, A. Amano, W.M. Todd, T. Isobe, P. Maricar, S. Nakano, K. Omori and S. Tanabe (Ehime University, Matsuyama, Japan)  
Distribution of copepods and effects of pollution on planktonic food web of Manila Bay
- 070 **Ricardo Palomares-García**, Jaime Gómez-Gutiérrez and Carlos J. Robinson (Centro Interdisciplinario de Ciencias Marinas, La Paz, Mexico)  
Winter vertical distribution of copepods in the Gulf of California, México
- 071 **Li-Chun Tseng**, J.S. Hwang and Q.C. Chen (National Taiwan Ocean University, Keelung, Taiwan)  
Autumn Copepod community structure and their feeding in the shallow mixed layer of the subtropical South China Sea
- 072 **Kyoungsoon Shin**, M.C. Jang, P.G. Jang, D.H. Shon and W.S. Kim (Korea Ocean Research and Development Institute, Geoje, Korea)  
Annual variations of vertical distribution of copepods in the Korea Strait
- 073 **Agata Weydmann**, J. Søreide, S. Kwasniewski, S. Falk-Petersen and J. Berge (Polish Academy of Sciences, Sopot, Poland)  
Seasonal dynamics in copepod community structure in a high Arctic fjord
- 074 **Juana Mireya Mendoza-Vera**, S. Kâ, M. Bouvy, C. Cuoc and M. Pagano (Centre d'Océanologie de Marseille, Marseille, France)  
Effects of the cyanobacteria *Cylindrospermopsis raciborskii* on the estuarine calanoid copepod *Pseudodiaptomus hessei*
- 075 **Adrián Cervantes-Martínez**, M. Elías-Gutiérrez and M.A. Gutiérrez-Aguirre (Universidad de Quintana Roo, Cozumel Quintana Roo, Mexico)

## PS VI: Life Cycle Strategies of Copepods

- 076 H.J. Lin, S.H. Cheng and **Wen-Been Chang** (National Museum of Marine Biology and Aquarium, Pingtung, Taiwan)  
Morphology on different molting stages of *Acartia southwelli* Sewell 1914
- 077 **Michal Šorf**, Z. Brandl and M. Vašek (University of South Bohemia, České Budějovice, Czech Republic)  
The different response of nauplii, copepodites and adult copepods to the presence and absence of underyearling perch (*Perca fluviatilis*) in experimental mesocosms
- 078 Ceballos-Vázquez, P., **G.M. Esqueda-Escárcega**, M. Arellano-Martínez and S. Hernández-Trujillo (Centro Interdisciplinario de Ciencias Marinas, La Paz, México)  
Gonad morphology and maturation in *Centropages furcatus*: first assessment in a Mexican subtropical lagoon
- 079 **Khunnaphat Nakhonchom** and L. Sanoamuang (Surindra Rajabhat University, Surin, Thailand)  
Fecundity and life span of *Neodiaptomus schmackeri* (Pope and Richard) and *Thermocyclops decipiens* Kiefer (Copepoda) in laboratory cultures
- 080 **Erica Goetze** and T. Kiørboe (University of Hawaii at Manoa, Honolulu, U.S.A.)  
Heterospecific mating and species recognition in planktonic marine calanoids
- 081 **Kareem Altaff** and I.D. Begum (The New College, Chennai, India)  
Oviducal glands in two species of *Pseudodiaptomus*- a new report
- 082 **Tomoko Yoshiki**, B. Yamanoha, T. Kikuchi and T. Toda (Soka University, Tokyo, Japan)  
Effect of hydrostatic pressure on embryos of the calanoid copepod, *Calanus sinicus*
- 083 D. Beyrend-Dur, S.H. Cheng, S. Souissi and **Jiang-Shiou Hwang** (National Taiwan Ocean University, Keelung, Taiwan)  
Reproductive biology of *Pseudodiaptomus annandalei* (Copepoda; Calanoida)
- 084 G. Dur, **Jiang Shiou Hwang**, S. Souissi, F. Schmitt and S.H. Cheng (National Taiwan Ocean University, Keelung, Taiwan)  
Behaviour of the copepod *Pseudodiaptomus annandalei*: comparison of the swimming pattern of female, ovigerous female and male
- 085 **Samba Kâ**, J.M. Mendoza-Vera, M. Pagano and C. Cuoc (Université Cheikh Anta Diop, Dakar, Sénégal)  
Genitalia of *Pseudodiaptomus hessei* (Copepoda, Calanoida, Pseudodiaptomidae)
- 086 **Gopikrishna Mantha** and K. Altaff (The New College, Chennai, India)  
Functional morphology and post embryonic development of *Apocyclops dengizicus* (Copepoda : Cyclopoida)
- 087 E.M. Guzera and **Maria I. Zmijewska** (University of Gdansk, Gdynia, Poland)  
Life strategy of Clausocalanidae family in coastal Antarctic waters (Admiralty Bay, King George Island)

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- 088 **Cecilia Enríquez García**, S. Nandini, and S.S.S. Sarma (Universidad Nacional Autónoma de México, Mexico City, Mexico)  
Demographic characteristics of the copepod *Acanthocyclops robustus* fed mixed algal (*Scenedesmus acutus*)-rotifer (*Brachionus havanaensis*) diet
- 089 C.H. Lee, H.U. Dahms, S.H. Cheng and **Jiang-Shiou Hwang** (National Taiwan Ocean University, Keelung, Taiwan)

- Hydrodynamic patterns affect copepod mating and predation by grouper larvae *Epinephelus coioides* on *Pseudodiaptomus annandalei* (Copepoda, Calanoida)
- 090 **S. Vinogiri Krishnan** (University Science of Malaysia, Penang, Malaysia)  
Efficiency of *Mesocyclops aspericornis* (Copepoda: Cyclopoida) in controlling vector mosquito larvae in laboratory and field predation experiments
- 091 **Ricardo Palomares-García**, R. De Silva-Dávila and R. Avendaño-Ibarra (Centro Interdisciplinario de Ciencias Marinas, La Paz, Mexico)  
Predation of the copepod *Oncaea mediterranea* upon cephalopod paralarvae in the Gulf of California
- 092 **Adelaide Rhodes** (University of Washington, Seattle, USA)  
Rapid method to detect the relative uptake of copepods by larval marine fish

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- 093 **Wen-Tseng Lo**, P.K. Hsu, H.Y. Hsieh, C.L. Chung and C.T. Shih (National Sun Yat-Sen University, Kaohsiung, Taiwan, Republic of China)  
Responses of copepods and hydrology to the removal of mariculture racks in a coastal lagoon in Taiwan
- 094 **Guillaume Drillet** and G. Dur (Roskilde University, Roskilde, Denmark)  
Providing new tools for scientist : the world copepod culture database Roskilde University

## PS IX: Ecotoxicological Studies of Copepods

- 095 I.T. Yu, K.W. Lee, C.H. Yoon, S.J. Lee, M.Y. Yoon and **Jae-Seong Lee** (Hanyang University, Seoul, Korea)  
Copper enhances apoptosis but not cell survival in the copepod, *Tigriopus japonicus*
- 096 **Luiz Felipe Mendes Gusmão**, E.L. Gaeta Espíndola, M. Beraldo Masutti, R.W. Reis Filho (Australian Institute of Marine Science, Townsville, Australia)  
Effects of copper and chromium contamination on the populational structure of four freshwater copepod species in micro and mesocosms experiments
- 097 **Hyun Woo Bang**, W. Lee and I.S. Kwak (Chonnam National University, Yeosu, Korea)  
Delivering generation effects using full life cycle toxicity test on Harpacticoid copepod, *Tigriopus japonicus s.l.* exposure to bisphenol A

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- 098 **La-orsri Sanoamuang** and B. Boonsit (Khon Kaen University, Khon Kaen, Thailand)  
Species diversity and distribution of calanoid and cyclopoid copepods in Songkhram River basin, Northeast Thailand
- 099 **La-orsri Sanoamuang** and P. Wansuang (Khon Kaen University, Khon Kaen, Thailand)  
Calanoid and cyclopoid copepods from temporary waters in Ubon Ratchathani Province, Northeast Thailand
- 100 **La-orsri Sanoamuang** and S. Faitakum (Khon Kaen University, Khon Kaen, Thailand)  
Biodiversity of calanoid and cyclopoid copepods in the floodplain of the Mun River, northeast Thailand
- 101 **Rachada Chaicharoen** and L. Sanoamuang (Khon Kaen University, Khon Kaen, Thailand)

- Two new species of freshwater calanoid copepods from Cambodia
- 102 **Santi Watiroyram** A. Brancelj and L. Sanoamuang (Khon Kaen University, Khon Kaen, Thailand)  
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- 103 **Kamonwan Koompoot** and L. Sanoamuang (Khon Kaen University, Khon Kaen, Thailand)  
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- 104 **Dong Ju Lee** and W. Lee (Hanyang University, Seoul, Korea)  
On the morphological abnormality of planktonic copepods, *Pseudodiaptomus inopinus* and *Acanthocyclops vernalis*
- 105 **Juana Mireya Mendoza-Vera**, S. Kâ, C. Cuoc, M. Bouvy and M. Pagano (Centre d'Océanologie de Marseille, Marseille, France)  
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- 106 **Giuseppe Alfonso** and G. Belmonte (University of Salento, Lecce, Italy)  
Distribution of Calanoida in freshwater bodies of Apulia (S.E. Italy)
- 107 **Min Ho Seo**, Y.H. Yoon, Y.S. Sin, and H.Y. Soh (Chonnam National University, Yeosu, Korea)  
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- 108 V.R. Alekseev and **Maria R. Miracle** (University of Valencia, Burjassot, Spain)  
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- 109 V.R. Alekseev, M. Sahuquillo and **Maria R. Miracle** (University of Valencia, Burjassot, Spain)  
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- 110 **Martin Krajicek** and M. Cerny (Charles University in Prague, Prague, Czech Republic)  
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- 111 **Cheng-Han Wu**, S.H. Cheng and J.S. Hwang (National Taiwan Ocean University, Keelung, Taiwan)  
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- 112 **Kareem Altaff** and P. Muthupriya (The New College, Chennai, India)  
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- 113 **Khunnaphat Nakhonchom** and L. Sanoamuang (Khon Kaen University, Khon Kaen, Thailand)  
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- 114 **Eduardo Suárez-Morales**, M.A. Gutiérrez-Aguirre and E. Walsh (El Colegio de la Frontera Sur, Chetumal, Mexico)  
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- 115 **Nancy Mercado Salas**, E. Suárez-Morales and M. Silva-Briano (El Colegio de la Frontera Sur, Chetumal, Mexico)  
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- 117 **Rachada Chaicharoen** and L. Sanoamuang (Khon Kaen University, Khon Kaen,

- Thailand)  
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- 118 **Luiz Felipe Mendes Gusmão** and D. McKinnon (Australian Institute of Marine Science, Townsville, Australia)  
*Acrocalanus gracilis* development and intersexuality in the Timor Sea
- 119 **Ksenia N. Kosobokova** and R.R. Hopcroft (P.P. Shirshov Institute of Oceanology RAS, Moscow, Russia)  
 Population structure and egg production of *Metridia longa* in the Arctic Ocean
- 120 T. Björnberg and **Terue C. Kihara** (Universidade de São Paulo, São Paulo, Brazil)  
 The nauplii of Tetragonicipitidae (Copepoda: Harpacticoida)
- 121 **Supawadee Chullasorn** and P. Kangtia (Ramkhamhaeng University, Bangkok, Thailand)  
 Naupliar development of *Robertsonia* sp. (Copepoda: Harpacticoida: Miraciidae) from a brown alga in Thailand
- 122 **Supawadee Chullasorn**, W. Anansatitporn, P. Kangtia, P. Klangsin and R. Jullawateelert (Ramkhamhaeng University, Bangkok, Thailand)  
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- 123 **Argun A Özak** and I. Cengizler (University of Cukurova, Adana, Turkey)  
 Morphology and light microscope histology of female reproductive system of *Caligus minimus* Otto, 1821 (Copepoda : Caligidae)
- 124 P. Muthupirya and **Kareem Altaff** (The New College, Chennai, India)  
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- 125 **Teruaki Yoshida**, E.E. Jin, T. Toda and B.H.R. Othman (Universiti Kebangsaan Malaysia, Bangi, Malaysia)  
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- 126 **Tran Vu Phong**, N. Tuno, H. Kawada, and M. Takagi (Nagasaki University, Nagasaki, Japan)  
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