

Contents

Preface	v
International Symposium on Environmental Specimen Bank December 3–5, 2009, Ehime University, Matsuyama, Japan Concluding Session—Suggestions for Establishing ESBs in Developing Countries: Necessity and Possibility	vii
Environmental Specimen Bank (<i>es</i> -BANK) of Ehime University, Japan— Current Status and Future Perspectives— S. Tanabe and K. Ramu	1
Thirty Years of Progress in Environmental Specimen Banking P. R. Becker and S. A. Wise	7
Specimen Banking for Marine Animal Health Assessment J. Kucklick, R. Pugh, P. Becker, J. Keller, R. Day, J. Yordy, A. Moors, S. Christopher, C. Bryan, L. Schwacke, C. Goetz, R. Wells, B. Balmer, A. Hohn and T. Rowles	15
Environment Canada’s National Wildlife Specimen Bank: A Valuable Resource for Monitoring and Research B. M. Braune, G. Savard, B. J. Wakeford and D. J. McGoldrick	25
The Marine Environmental Specimen Bank (Marine ESB): A Research and Environmental Monitoring Resource R. S. Pugh, A. J. Moors, L. B. Rust, B. J. Porter and P. R. Becker	33
A Method for Analysis of Thyroid Hormones in Perchlorate-administered Rats by Liquid Chromatography-Tandem Mass Spectrometry: Potential Application to Samples Stored in <i>es</i> -Bank of Ehime University T. Kunisue, K. Kannan, J. W. Fisher and S. Tanabe	43
Concentrations of Benzotriazole UV Stabilizers and Polycyclic Musks in Wastewater Treatment Plant Samples in Japan H. Nakata and R. Shinohara	51

Retrospective Assessment of Environmental Pollution by PBDEs and HBCDs Using Sediment Core from Manila Bay, the Philippines T. Isobe, A. Amano, K.-H. Chang, R. H. Maneja, P. B. Zamora, M. L. San Diego-McGlone, F. P. Siringan, M. Prudente, T. W. Miller and S. Tanabe	61
Polychlorinated Biphenyls and Hydroxylated Polychlorinated Biphenyls in the Blood of Toothed and Baleen Whales Stranded along Japanese Coastal Waters K. Nomiyama, S. Murata, T. Kunisue, T. K. Yamada, H. Mizukawa, S. Takahashi and S. Tanabe	67
Environmental Monitoring of Trace Elements Using Marine Mammals as Bioindicators—Species-specific Accumulations and Temporal Trends— S. Horai Hirata, Y. Yasuda, S. Urakami, T. Isobe, T. K. Yamada, Y. Tajima, M. Amamo, N. Miyazaki, S. Takahashi and S. Tanabe	75
Retrospective Monitoring of Perfluorinated Compounds in Archived Herring Gull Eggs H. Rüdél, J. Müller, H. Jüriling and C. Schröter-Kermani	81
Research Strategies and Development Possibilities of a Marine Mammal Tissue Bank: Conservation Biology and Biomolecular Science A. Peruffo, M. Panin, M. Suman, S. Mazzariol, C. Ballarin, M. Giurisato and B. Cozzi	87
Climate Impact Research—Contributions and Options of the German ESB M. Paulus, M. Quack, D. Teubner, M. Bartel-Steinbach, R. Klein, K. Tarricone, G. Wagner, A. Körner and M. Veith	95
Temporal Trends of Organochlorines and Trace Elements in Marine Mammals from Hong Kong M. B. Murphy, L. Jin and P. K. S. Lam	103
Pollution Trends in India—Evidence for the Need of an Environmental Specimen Bank A. Subramanian, G. Devanathan, S. Takahashi and S. Tanabe	111
Why are there Different Age Related Trends for Different Chemicals? J. F. Mueller and L.-M. L. Toms	119
The National Environmental Specimen Bank in Korea: Establishment and Standard Operating Procedures M. Kim, T. Choi, A. Han, J. Shin and J. Lee	125
Molecular Characterization of Peroxisome Proliferator-Activated Receptor Isoforms from the Baikal Seal (<i>Pusa sibirica</i>) H. Ishibashi, E.-Y. Kim, S. Tanabe and H. Iwata	133

Development of an <i>in vitro</i> Reporter Gene Assay for Screening the Ecdysone Receptor Agonists in Mysid Crustacean M. Hirano, H. Ishibashi, E.-Y. Kim, K. Arizono and H. Iwata	141
Toxic Effects of 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -Dioxin (TCDD) on Peripheral Nervous System of Developing Red Seabream (<i>Pagrus major</i>) Embryos M. Iida, E.-Y. Kim, Y. Murakami, Y. Shima and H. Iwata	149
Cytochrome P450 Family 1 Genes in <i>Xenopus tropicalis</i> K. T. Suzuki and H. Iwata	155
Characterization of Polychlorinated Biphenyls and Polybrominated Diphenyl Ethers in Sediments from Leachate and Control Wells of Benowo Dumping Site, Surabaya, Indonesia: A Preliminary Report M. Ilyas, A. Sudaryanto, I. E. Setiawan, T. Isobe, S. Takahashi and S. Tanabe	161
Organohalogen and Metabolite Contaminants in Human Serum Samples from Indian E-Waste Recycling Workers A. Eguchi, K. Nomiya, A. Subramanian, P. Parthasarathy, K. A. Bulbule, S. Takahashi and S. Tanabe	167
Accumulation Features of Hydroxylated-PCBs (OH-PCBs) in the Blood of Pigs Collected from a Dumping Site for Municipal Wastes in India H. Mizukawa, K. Nomiya, T. Kunisue, M. X. Watanabe, A. Subramanian, S. Takahashi and S. Tanabe	175
UPLC-MS/MS Determination of Organophosphorus Flame Retardants and Ultraviolet Absorbers in River Water and STP Effluent Samples J.-W. Kim, T. Isobe and S. Tanabe	183
Polybrominated Diphenyl Ethers and Polychlorinated Biphenyls in Cow Milk Samples from Ghana K. A. Asante, A. Sudaryanto, G. Devanathan, M. Bello, S. Takahashi, T. Isobe and S. Tanabe	191
Biomagnification of Arsenic Species in the Deep-sea Ecosystem of the Sagami Bay, Japan D. Hayase, T. Agusa, S. Toyoshima, S. Takahashi, S. Horai Hirata, T. Itai, K. Omori, S. Nishida and S. Tanabe	199
Utilization of <i>es</i> -BANK of Ehime University for Monitoring Environmental Pollutants in Indonesia: A Case Study for Brominated Flame Retardants in Biota, Human and Environmental Samples A. Sudaryanto, I. E. Setiawan, A. S. Riyadi, M. Ilyas, Y. Anantasena, R. Djamaluddin, T. Isobe, S. Takahashi and S. Tanabe	205

Specific Accumulation of BFRs in Finless Porpoises from Japan
T. Oshihoi, T. Isobe, H. Hamada, T. K. Yamada,
Y. Tajima and S. Tanabe 215