

Contents

Session 1 Proteomics/Analytical/Structure 1

Interaction of Local Anesthetic Drugs and Na ⁺ Channel Inactivation Gate Peptide in Linker between Domain III and IV by Electrospray Tandem Mass Spectrometry and Surface Plasma Resonance	3
<i>Bih-Show Lou, Pei-Shan Wu, Yuan-Chin Chen, and Hui-Fen Wu</i>	

Femtosecond Two-dimensional Infrared Spectroscopy can be Used to Differentiate Antiparallel from Parallel β -sheet Conformations	8
<i>Jianping Wang</i>	

On-line High-performance Liquid Chromatography/ Mass Spectrometric Investigation of the Syntheses of KLVFF and DLVPL Peptides	13
<i>Qing Zeng</i>	

Self-assembly Structure of Oligopeptide Studied by Using Scanning Tunneling Microscopy	20
<i>Lin Niu, Xiaojing Ma, Xiaobo Mao, Lei Liu, Chen Wang</i>	

Session 2 Peptide Synthesis 25

Synthesis and Evaluation of Antitumor Activity of Sansalvamide Analogue	27
<i>Xia Tian, Yihua Yang, Xiaoli Zhen, Shouxin Liu, Xiaojie Zhang</i>	

Synthesis of Zygosporamide Cyclic Peptide	30
<i>Yihua Yang, Jianrong Han, Shouxin Liu, Jiangchao Wang, Yachao Zhu</i>	

The Application of Cross-Mated Strategy between Boc and Fmoc Chemistry in Peptide Synthesis	33
<i>Xiao-Xiao Yang, Hao Lin, Xiang Han, He-He Feng, De-Xin Wang</i>	

Synthesis of Functionalized 2,5-Diketopiperazines from C-phenacyl

Ester Protected Dipeptides	38
<i>Hao Lin, Dexin Wang</i>	
Synthesis of A Dual-Peptide Jointed by Diketopiperazine Ring	42
<i>Xiang Han, Hao Lin, De-Xin Wang</i>	
Transfer Active Ester Condensation: An Efficient Technology Used for Long Chain Peptide, Branch Peptide and Peptide C-terminal Derivative Synthesis	47
<i>Yanli Chen, Pu Wang</i>	
Biomimetic Synthesis of Gramicidin S from Linear Pentapeptide Precursor on Safety-catch Resin	51
<i>Chuanguang Qin, Ruijie Zhang, Yan Ding, Weining Niu, Xiaoya Shang, Liheng Wang, Yang Li</i>	
Suppression and Application of Some Side Reactions in Peptide Synthesis	57
<i>Yun-hua Ye</i>	
Preparation of A Novel Compound and Its Application in Liquid Phase Peptide Synthesis and Purification	63
<i>Zhi-Ping Huang, Ming Zhang</i>	
Recent Developments in Microwave Enhanced Solid Phase Peptide Synthesis	67
<i>Jonathan Collins, Michael J. Collins Jr., Sandeep K. Singh, Grace Vanier, Hillary Merriweather, Alicia Douglas, Zachary J. Cox, and Bo Jiang</i>	
Fast Automated Conventional Fmoc Solid Phase Peptide Synthesis of Human β -Amyloid (1-42)	74
<i>German Fuentes, Christina A. Hood, Hirendra Patel, Mahendra Menakuru, Jae H. Park</i>	
Stepwise Solid Phase Synthesis of Long and Difficult Peptides	82
<i>Haitao Wang, Mochu Wei, Sheng Chen, Lanlan You, Zhenya Wang, Zilu Tan, Jie Zhao, Fang Yu, Shangshan Chen, Wentao Zhang</i>	
A Scale-up Preparation of RTD-1 Peptide Using Solid Phase and	

Solution Phase Synthesis	91
<i>Hengwei Chang and Wei Wang</i>	
Session 3 Peptide Towards the Clinic.....	99
Exploring New Approaches to the Treatment of Prolonged Pain: Neuroplasticity, Disease, and Drug Design	101
<i>Victor J. Hruby, Takashi Yamamoto, Padma Nair, Deepika Laddu, Shou-Wu Ma, Tally Largent-Milnes, Peg Davis, Todd Vanderah, Josephine Lai, Richard Egleton, and Frank Porreca</i>	
Structure-Activity Relationships of Peptide and Small Molecule of a-MSH Analogues Targeting the Human Melanocortin Receptors	106
<i>Minying Cai, Yingkui Yang, Erin Palmer, Matt Dedek, Victor J. Hruby</i>	
Session 4 Peptide and Amyloid Disease	109
Amyloid Diseases and Their Inhibitors.....	111
<i>Weiwei Li, Meisha Chen</i>	
Copper (II) Modulates the Aggregation of A Peptide from the Fourth Repeat of Tau.....	118
<i>Chun-Hui Yu, Yan-Mei Li</i>	
Session 5 Peptide-based Biomaterials	127
Isolation and Characterization of Potent Antibiotic Peptides from Potato Tubers (<i>Solanum tuberosum</i> L cv. Gogu Valley)	129
<i>Jong-Kook Lee, Nari Jeong, Byung Kwan Son, Joon Soo Hahm, Yoonkyung Park, and Kyung-Soo Hahm</i>	
Antibiotic Activity of Novel Synthetic Peptides Against Pathogenic and Antibiotic Resistant Microorganisms Isolated from Gallbladder Bile in Patients with Cholelithiasis	133
<i>Jong-Kook Lee, Nari Jeong, Byung Kwan Son, Joon Soo Hahm, Yoonkyung Park, and Kyung-Soo Hahm</i>	
Fungicidal Effect of Rice Pex5p, A Receptor for Peroxisomal Matrix Proteins	137
<i>Seong-Cheol Park, Yoonkyung Park, and Kyung-Soo Hahm</i>	

Antibiotic Effect of Antimicrobial Peptide HPA3 against Multi-Drug Resistant Bacteria from Otitis Media	142
---	-----

Hae-Kyun Park, Yoonkyung Park, Chul Ho Jang, and Kyung-Soo Hahm

Purification, Isolation and Characterization of Pr-1, A Novel Antifungal Protein, from Pumpkin Rind	145
---	-----

Seong-Cheol Park, Jin-Young Kim, Hyeonsook Cheong, Yoonkyung Park, Kyung-Soo Hahm

Session 6 Miscellaneous 149

Exendin-4 Induction of Gene Expression in RINm-5F beta-cells	151
--	-----

Jiayi Yu^a, Di Wang, Jie Chen, Lifeng Wang, Wei Li

Monomeric Insulin with Mutation at B22 Arginine	156
---	-----

Ting Chen and Youshang Zhang