

2019 International Forum on Functional Materials (IFFM 2019)

9th International Symposium for Plasma Biosciences (ISPB2017-9)

6th International Symposium on Chemical & Biological Detection (ISCBD-6)

5th International Symposium on Medical Diagnosis using Bionano Sensor

2nd International Symposium on Energy Conversion & Storage Materials (ISECSM-2)

June 23-26, 2019

St. JOHN'S Hotel (4F), Gangneung City, Korea

<http://iffm2019.org>

Organized by:

- Nanosensor Institute, Hanyang University
- Chemical and Biological Detection Research Center at Sungkyunkwan University (SKKU)
- Plasma Bioscience Research Center (PBRC-SRC) at Kwangwoon University
- Research Institute for Green Energy Conversion Technology at Gyeongsang National University
- **Korean Vacuum Society**
- **Korean Biochip Society**
- **Korean Battery Society**

Conference Chair: Prof. Jaebum Choo (Hanyang University, Korea)

Conference Co-Chairs: Prof. Jin-Hyo Boo (Sungkyunkwan University, Korea)

Prof. Eun Ha Choi (Kwangwoon University, Korea)

Prof. Tae-hyun Nam (Gyeongsang National University, Korea)

Secretary General: Prof. Sang Uck Lee (Hanyang University, Korea)

Language

The official language of the conference is English.

Important Dates

March 31, 2019	Abstract submission deadline
April 30, 2019	Notification of Acceptance of Abstract
May 15, 2019	Early Registration Deadline
May 31, 2019	Accommodation Reservation Deadline
June 10, 2019	Final Program Announcement
July 31, 2019	Paper Submission Deadline

IFFM 2019 Topics

1. Functional Materials

- Photovoltaic materials
- Energy storage materials
- Electronic & semiconductor materials
- Opto-electronic & thermoelectric materials
- Ferroelectric/multiferroic, ferromagnetic & magneto-optical materials
- Organic and carbon-based nano-materials (Graphene, CNTs, DLC, etc.)
- Shape memory materials
- Others

2. Functional Thin Films and Coatings for Applications of

- Electronics & displays
- Solar cells
- Fuel cells
- Battery & Supercapacitors
- Semiconductor & electronic devices
- Organic & inorganic materials devices
- Sensors (chemical or optical) and actuators
- Others

3. Science & Technology of Functional Materials

- Computational science of functional materials (Design and Modeling)
- Processing technologies of nanostructures, and nano-tubes and rods
- Thin film science and technology
- Advanced powder & laser processings
- Application of functional materials in micro- and nano-technologies
- Properties and characterization of films and modified surfaces

4. Plasma Biosciences and Medicines

- Plasma Biosciences and Medicine
- Plasma Biomaterials and Films
- Non-thermal Bioplasma Sources and Diagnostics
- Plasma Bio-Nano Materials and Scaffolds
- Plasma Agriculture and Foods
- Plasma Polymerization for Biosensors, etc.

5. Bio- & Nano-functional Materials

- Biosensor, Medical/Environmental Sensor
- Lab-on-a-Chip, MEMS & NEMS, Micro- & Nano-Fluidics
- Nanomedicine, Molecular Imaging, Drug & Gene Delivery

- Functional Nano & Bio-Materials
- Medical Diagnosis, Immunoanalysis, Molecular Diagnostics
- DNA/Protein Chip, Aptasensor

Abstract Submission Guideline

Prospective authors are invited to submit abstracts for presentations. Abstract(s) can be up to 1 page in length using a standard [format](#). A review process for those who submitted abstract(s) will be managed by IFFM 2019 Program Committee. Abstracts must be submitted electronically via IFFM 2019 website at www.iffm2019.org by **March 31, 2019**.

Conference Proceedings

All authors with accepted contributions to IFFM 2019 are invited to submit full papers to the Proceedings of IFFM 2019, which will be published as special issues in nominated international journals such as **Journal of Biomedical Nanotechnology(JBN) (IF=5.068)**, **Science of Advanced Materials(SAM) (IF=1.318)**, **Journal of Nanoscience & Nanotechnology(JNN) (IF=1.354)**, **Nanoscience and Nanotechnology Letters(NNL) (IF=2.917)**, etc. after peer-reviewing.

SCI (J. of Biomedical Nanotechnology, IF=5.068, American Scientific Publishers) 5 papers (\$2,250/paper)

SCIE (Science of Advanced Materials, IF=1.318, American Scientific Publishers) 30 papers (\$580/paper)

SCIE(J. of Nanoscience & Nanotechnology, IF=1.354, American Scientific Publishers) 70 papers (\$580/paper)

SCIE (Nanoscience and Nanotechnology Letters, IF=2.917, American Scientific Publishers) 50 papers (\$580/paper)

Registration

All participants must pay the registration fee. Online registration with credit cards will be available through the homepage (www.iffm2019.org). For those who wish to register on-site, credit cards and cash in local currency (KRW; Korean Won) will be accepted. The fee schedule is:

Conference Registration Fees

Category	Regular	Student	Accompanying Person
Pre-registration (before May 15, 2017)	US 500\$	US 250\$	US 50\$
On-site registration (after May 15, 2017)	US 550\$	US 300\$	US 50\$

Plenary and Invited Speakers

Plenary Speakers

Prof. Shu-Hong Yu (University of Science and Technology of China (USTC), China)

Prof. Joshua Edel (Imperial College London, UK)

Prof. Yinong Liu (Western Australia University, Australia)

Prof. K. D. Weltman (INP, Germany)

Invited Speakers

Prof. Lu Li (National University of Singapore, Singapore)

Prof. Shu Yin (Tohoku University, Japan)

Prof. Xue Dongfeng (Changchun Institute of Applied Chemistry, CAS, China)

Prof. Hyoyoung Lee (Sungkyunkwan University, Korea)

Prof. Joonsuk Huh (Sungkyunkwan University, Korea)

Prof. Chang Young Lee (UNIST, Korea)

Prof. Hee Young Kim (Institute of Materials Science, University of Tsukuba, Japan)

Prof. Dong-won Kim (Hanyang University, Korea)

Prof. Rong Yang (Xi'an University of Science and Technology, China)

Prof. Rongke Gao (Hefei University of Technology, China)

Prof. Junhu Cheng (South China University of Technology, China)

Prof. Sang-Uk Lee (Hanyang University, Korea)

Prof. Lai-Kwan Chau (National Chung Cheng University, Taiwan)

Prof. Young Bok Lee (Hanyang University, Korea)

Prof. Yinglin Yan (Xi'an University of Science and Technology, China)

Prof. Masaru Hori (Nagoya University, Japan)

Prof. Michael Kong (Old Dominion University, USA)

Prof. Satoshi Hamaguchi (Osaka University, Japan)

Prof. Masafumi Ito (Meijo University, Japan)

Prof. Masaharu Shiratani (Kyushu University, Japan)

International Advisory Board

Prof. Lu Li (National University of Singapore, Singapore)
Prof. Rudiger Andreas (Universite d' avant-garde, Canada)
Prof. Alexander Fridman (Drexel University, USA)
Prof. K. D. Weltman (INP, Germany)
Prof. Masaharu Shiratani (Kyushu University, Japan)
Prof. Rod Boswell (ANU, Australia)
Dr. H. Lee (ADD, Korea)
Prof. Jean Michel Pouvesle (University of Orleans, France)
Prof. Hongjie Zhang (Changchun Institute of Applied Chemistry, CAS, China)
Prof. Shu-Hong Yu (University of Science and Technology of China (USTC), China)
Prof. Van Humbeeck Jan (Kathelieke Universiteit Leuven, Belgium)
Prof. Janina Molenda (AGH University of Science and Technology, Poland)
Prof. Shi-Gang Sun (The University of Hong Kong, China)
Prof. Dongfeng Xue (Changchun Institute of Applied Chemistry, CAS, China)
Prof. R. Jayavel (Anna University, India)
Prof. Gao Wei (The University of Auckland, New Zealand)
Prof. Cheol Eui Lee (Korea University, Korea)
Prof. Kyoung Nam Kim (Yonsei University, Korea)
Prof. Chul Sung Kim (Kookmin University, Korea)
Prof. Jeon Geon Han (Sungkyunkwan University, Korea)
Prof. Gwangsup Cho (Kwangwoon University, Korea)
Prof. Hong Young Chang (KAIST, Korea)
Prof. Roger Waeppling (Uppsala University, Sweden)
Prof. Andrew J Bell (University of Leeds, UK)
Prof. Geun Young Yeom (Sungkyunkwan University, Korea)
Prof. Kiwon Kim (Gyeongsang National University, Korea)
Prof. Soon-ki Kwon (Gyeongsang National University, Korea)
Prof. Yinong Liu (Western Australia University, Australia)
Prof. David Kisailus (University of California, Riverside, USA)
Prof. Ruediger A. Eichel (University of Freiburg, Germany)
Prof. Kwangsup Soh (Seoul National University, Korea)
Prof. Mounir Laroussi (Old Dominion University, USA)
Prof. Michael Kong (Old Dominion University, USA)
Prof. Satoshi Hamaguchi (Osaka University, Japan)
Prof. Masaru Hori (Nagoya University, Japan)
Prof. Hidenori Akiyama (Kumamoto University, Japan)
Prof. Seiji Kanazawa (Oita University, Japan)
Prof. Masafumi Ito (Meijo University, Japan)
Prof. Lingxin Chen (Chinese Academy of Sciences, China)
Prof. Lai-Kwan Chau (National Chung Cheng University, Taiwan)
Prof. Ki Bum Lee (Rutgers University, USA)
Prof. Eiry Kobatake (Tokyo Institute of Technology, Japan)
Prof. Joshua Edel (Imperial College London, UK)
Prof. Steve Soper (University of North Carolina, USA)
Prof. Han S. Uhm (Kwangwoon University, Korea)
Prof. G. Morfill (Max Planck Institute, Germany)
Prof. My Ali El Khakani (INRS, Quebec, Canada)

Program & Publication Committee

Prof. Jeahyeong Lee (Chair) (Sungkyunkwan University, Korea)
Prof. Kwonkoo Cho (Co-Chair) (Gyeongsang National University, Korea)
Prof. Ku Yeoun Baik (Co-Chair) (Kwangwoon University, Korea)
Prof. Changsik Song (Co-Chair) (Sungkyunkwan University, Korea)
Prof. Lu Li (National University of Singapore, Singapore)

Prof. Shu Yin (Tohoku University, Japan)
Prof. Xue Dongfeng (Changchun Institute of Applied Chemistry, CAS, China)
Prof. Xinpei Lu (HuaZhong University, China)
Prof. Greg Fridman (Drexel University, USA)
Prof. Deborah Connell (University of York, UK)
Prof. Kazuo Shimizu (Shizuoka University, Japan)
Prof. Timo Gans (University of York, UK)
Prof. Lenka Zajickkova (Masaryk University, Czech Republic)
Prof. Jong-Shin Woo (National Chiao Tung University, Taiwan)
Dr. Jae Ho Kim (AIST, Japan)
Prof. Vandana Miller (Drexel University, USA)
Dr. Sybille Hasse (Plasmatis, Germany)
Prof. Cho Gyubong (Gyeongsang National University, Korea)
Prof. Hyo-jun Ahn (Gyeongsang National University, Korea)
Prof. Jungpil Noh (Gyeongsang National University, Korea)
Prof. Jou-Hyeon Ahn (Gyeongsang National University, Korea)
Prof. Taek Dong Jung (Seoul National University, Korea)
Prof. Jiman Kim (Sungkyunkwan University, Korea)
Prof. Byungyou Hong (Sungkyunkwan University, Korea)
Prof. Tae Kyu Ahn (Sungkyunkwan University, Korea)
Prof. Sungho Park (Sungkyunkwan University, Korea)
Prof. Neaeung Lee (Sungkyunkwan University, Korea)
Prof. Hyoyoung Lee (Sungkyunkwan University, Korea)
Prof. Yong Ho Kim (Sungkyunkwan University, Korea)
Prof. Jung-Hoon Joo (Kunsan National University, Korea)
Dr. Suk Jae Yoo (NFRI, Korea)
Prof. Yun Ji Kim (Korea Food Research Institute, Korea)
Prof. Byungchoo Park (Kwangwoon University, Korea)
Prof. Nagendra Kaushik (Kwangwoon University, Korea)
Prof. Pankaj Attri (University of Antwerp, Belgium)
Dr. Sang Hye Ji (Kwangwoon University, Korea)
Prof. Chin-Wook Chung (Hanyang University, Korea)
Prof. Hyangshuk Rhim (Catholic Medical Center, Korea)
Dr. Yong Cheol Hong (NFRI, Korea)
Prof. Jun-Seok Oh (Osaka City University, Japan)
Dr. Kwang Ryeol Lee (KIST, Korea)
Prof. Joo-Hyung Kim (Inha University, Korea)
Prof. Sungsu Park (Ewha Womans University, Korea)
Prof. Joohoon Kim (Kyunghee University, Korea)
Prof. Jae IL Kim (Donga University, Korea)
Dr. Jong Taek Yeom (KIMS, Korea)

Local Organizing Committee

Prof. Sang Uck Lee (Chair) (Hanyang University, Korea)

Prof. Heon-Ju Lee (Co-chair) (Jeju National University, Korea)

Prof. Kyoung Koo Baeck (Co-Chair) (Gangneung Wonju National University, Korea)

Prof. Gi C. Kwon (KwangWoon University, Korea)

Prof. Gu Halbon (Chonnam National University, Korea)

Prof. Yeonwook Kim (Keimyung University, Korea)

Prof. Cheoljin Kim (Gyeongsang National University, Korea)

Dr. Hyunsoo Kim (Korea Electrotechnology Research Institute, Korea)

Dr. Chilhoon Doh (Korea Electrotechnology Research Institute, Korea)

Prof. Kwangsun Ryu (University of Ulsan, Korea)

Prof. Namju Cho (Pusan National University, Korea)

Prof. Jaekook Kim (Chonnam National University, Korea)

Dr. Youngkoo Kang (Korea Research Institute of Chemical Technology, Korea)

Prof. Changwoo Lee (Kyunghee University, Korea)

Prof. Jae-Hee Han (Gachon University, Korea)

Prof. Do Hyun Ryu (Sungkyunkwan University, Korea)

Prof. Young Dok Kim (Sungkyunkwan University, Korea)

Prof. Dae Joon Kang (Sungkyunkwan University, Korea)

Prof. Yang Gyun Kim (Sungkyunkwan University, Korea)

Prof. Jin Yong Lee (Sungkyunkwan University, Korea)

Prof. YounJea Kim (Sungkyunkwan University, Korea)

Prof. Dong G. Jung (Sungkyunkwan University, Korea)

Prof. Taesung Kim (Sungkyunkwan University, Korea)

Prof. Dong-Ki Lee (Sungkyunkwan University, Korea)

Prof. Yong-Cheol Kang (Pukyong National University, Korea)

Prof. SangGyu Im (Kook Min University, Korea)

Prof. Sung Soo Kim (Paichai University, Korea)

Prof. Ok Chan Jeong (Inje University, Korea)

Prof. Jong Cheol Lee (Gangneung Wonju National University, Korea)

Prof. Jin Joo Choi (Kwangwoon University, Korea)

Prof. Tae Hun Chung (Dong-A University, Korea)

Prof. Won Ho Choe (KAIST, Korea)

Prof. Gyungsoon Park (Kwangwoon University, Korea)

Prof. Gun Joon Lee (Kwangwoon University, Korea)

Prof. Bong Joo Park (Kwangwoon University, Korea)

Prof. In Tae Kim (Kwangwoon University, Korea)

Prof. Young Joon Hong (Kwangwoon University, Korea)

Prof. Weontae Lee (Yonsei University, Korea)

Prof. Ki Won Song (Yonsei University, Korea)

Dr. Il Ki Han (KIST, Korea)

Dr. Dong Chan Lim (KIMS, Korea)

Dr. Y. Kang (ADD, Korea)

Prof. Pil Seok Chae (Hanyang University, Korea)

Prof. Young Bok Lee (Hanyang University, Korea)

Prof. Jong Man Park (Gyeongsang National University, Korea)

Prof. Sung Gap Lee (Gyeongsang National University, Korea)

Prof. Sang Yong Nam (Gyeongsang National University, Korea)

Prof. Hyo-kyung Sung (Gyeongsang National University, Korea)

Prof. Yoon-ki Lee (Gyeongsang National University, Korea)

Prof. Junh-suk Oh (Gyeongsang National University, Korea)