



# NEMO 2020

August 1-3, 2020, Hangzhou, China

2020 IEEE MTT-S International Conference on Numerical Electromagnetic and Multiphysics Modeling and Optimization



[www.2020nemo-ieee.org](http://www.2020nemo-ieee.org)

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## Call for Papers

NEMO2020 ([www.2020nemo-ieee.org](http://www.2020nemo-ieee.org)) brings together experts of electromagnetics- and multiphysics-based modeling, simulation, optimization and design for RF, microwave, terahertz, optics, and other applications. This conference is an ideal forum to share new ideas on modeling and design for electromagnetics and multiphysics, propose efficient design algorithms, tools, routes, strategies, and anticipate the modeling/analysis/optimization needs of future technologies and applications.

Founded by the IEEE MTT-S, NEMO is an annual focal event on electromagnetics- and multiphysics-based modeling, simulation and design for microwave, antennas & propagation, and electromagnetic compatibility (MAPE), rotating between Europe, North America and Asia.

NEMO2020 aims to stimulate broad discussion and exploration of disruptive technologies for MAPE in addition to traditional topics. The conference features an exciting technical program, an industry exhibition, a special program of Women in NEMO for MAPE, and invited talks by internationally recognized experts in electromagnetic and multiphysics modeling, simulation, high performance computing, and optimization applied for RFIC, 3DIC, SiP, Terahertz Electronics, Nanoelectronics, Nanophotonics, and 5G wireless communication, etc.

IEEE Trans. on MTT will publish a mini-special issue devoted to NEMO2020. NEMO2020 is also technically co-sponsored by the IEEE Antennas and Propagation Society and IEEE Electromagnetic Compatibility Society.

### Important Dates

Preliminary Paper Submission Deadline	<b>March 15, 2020</b>
Notification of Acceptance	<b>May 5, 2020</b>
Final Paper Submission	<b>June 5, 2020</b>
Conference Date	<b>August 1-3, 2020</b>

### Special Program of Women in NEMO for MAPE



#### Conference General

##### Co-Chairs:

Wen-Yan, Yin ([wyyin@zju.edu.cn](mailto:wyyin@zju.edu.cn))  
Zhejiang University, China

Erping, Li ([liep@zju.edu.cn](mailto:liep@zju.edu.cn))  
ZJU-UIUC Institute

Junfa, Mao ([jfmao@sjtu.edu.cn](mailto:jfmao@sjtu.edu.cn))  
Shanghai Jiaotong University

##### International Advisory Committee:

Branko Kolundzija (Serbia)

Costas Sarris (Canada)

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Eric Michielssen (USA)

George E. Ponchak (USA)

Hakan Bagci (Saudi Arabia)

Jianming Jin (USA)

Jun Hong Kim (Korea)

Ke Wu (Canada)

Lei Zhu (Macao, China)

Levent Sevgi (Turkey)

Marcello Damore (Italy)

Ohnuki Shinichiro (Japan)

Q. H. Liu (USA)

Q. J. Zhang (Canada)

Qiang Chen (Japan)

Quan Xue (China)

Tiejun Cui (China)

W. C. Chew (USA)

Yang Hao (U.K.)

Yihong Qi (Canada)

Yilong Lu (Singapore)

Yingjie Guo (Australia)

Zhongxiang Shen (Singapore)

Saad Omar (Germany)

##### Executive Committee Chair:

Q. J. Zhang (Canada)

##### Executive Committee

##### Co-Chairs:

Wolfgang Hofer

James Rautio

Maurizio Bozzi

George E. Ponchak

Dominique Schreurs

##### Technical Program Committee Chairs:

Donglin Su

Gaofeng Wang

Lixin Guo

Yinghong Wen

Kaixue Ma

##### Technical Program Committee Co-Chairs:

Hongsheng Chen, Liang Zhou,

Zhixiang Huang, Haiwen Liu,

Jian Wang, Maokun Li,

Dazhi Ding, Yumao Wu,

Sheng Sun, Wensheng Zhao,

Qiubo Ye, Zhiyu Zhu,

Yejun He, Wenxiao Fang,

Yazhou Chen, Xiaobing Wang



上海市航空航天器电磁环境效应重点实验室  
Shanghai Key Laboratory of Electromagnetic Environment Effects for Aerospace Vehicle





## Conference Topics

- Modeling, simulation and design for MTT/AP/EMC
- Computational electromagnetics
- Multiphysics modeling, simulation and design
- Computational nanoelectronics
- Semi-analytical modeling and simulation
- Integral equation methods
- Finite difference/Finite element methods
- Hybrid simulation techniques
- Frequency-domain methods
- Time-domain methods
- High-frequency methods
- High performance CEM and applications
- High performance computational multiphysics
- EDA and CAD techniques
- Machine learning algorithms
- Artificial neural network modeling and optimization
- Neural computation and applications
- Metastructure simulation and applications
- EMC for circuit and system designs
- New and emerging areas
- EM reliability of devices and circuits
- Modeling and simulation of HPM effects
- Modeling and simulation of E3
- 2D material device modeling and design
- Interconnect modeling and design
- System-on-chip modeling and design
- 3DIC, AiP and SiP modeling and design
- Ultra-fast electronics device modeling
- Cognition-aided design
- Modeling of active devices and circuits
- Power electronics device modeling
- Space mapping optimization techniques
- Inverse electromagnetic problems
- 5G mobile system analysis and modeling
- Signal integrity analysis
- Modeling of biological effects
- Modeling of nanophotonic devices
- Terahertz circuit and modeling
- New EM materials modeling and simulation

### Conference Award Committee:

- D. L. Su (China)
- D. Jiao (USA)
- Dominique Schreurs (Belgium)
- H. S. Chen (China)
- L. J. Jiang (China)
- J. M. Song (USA)
- Jose Schutt-Aine (USA)
- K. L. Wu (China)
- L. Zhu (China)
- R. S. Chen (China)
- X. D. Chen (Singapore)
- Y. P. Zhang (Singapore)
- Y. X. Guo (Singapore)
- Z. X. Sheng (Singapore)
- Z. Z. Chen (Canada)

### Women in NEMO for MAPE

#### Chairs:

- Dominique Schreurs
- Donglin Su

### Women in NEMO for MAPE

#### Co-Chairs:

- Dan Jiao
- Wenquan Che
- Qiaowei Yuan
- Yinghong Wen
- So Young Kim
- Lingling Sun

### Local Arrangement Chairs:

- Wei E. I. Sha ([weisha@zju.edu.cn](mailto:weisha@zju.edu.cn))
- Fei Gao([gaofezju@zju.edu.cn](mailto:gaofezju@zju.edu.cn))

### Finance and Exhibition

#### Chairs:

- Hao Xie([xieh@zju.edu.cn](mailto:xieh@zju.edu.cn))
- Wenchao Chen ([wenchaochen@zju.edu.cn](mailto:wenchaochen@zju.edu.cn))

### Registration Chairs:

- Yang Du([zjuydu03@zju.edu.cn](mailto:zjuydu03@zju.edu.cn))
- Shurun Tan([srtan@intl.zju.edu.cn](mailto:srtan@intl.zju.edu.cn))

### Contact Us:

- Web: [www.2020nemo-ieee.org](http://www.2020nemo-ieee.org)
- Email: [nemo2020staff@126.com](mailto:nemo2020staff@126.com)

## Women in NEMO for MAPE Awards

The winners of the Women in NEMO for MAPE Award will be selected by International Awards Committee and announced during the Conference Banquet.

### Student Paper Prize

A Student Paper Competition will be held during NEMO2020. A student participating in this contest should be the first author of the paper and must present it personally in the conference. The work will be evaluated taking into account both presentation and reviewer comments/ranking.

The winners of the Best Student Paper Award will be selected by an International Awards Panel and announced during the Conference Banquet.

Winners will receive conference awards.

## Paper Submission

- Full Paper (3 pages, presentation & IEEE Xplore)
- Abstract ( 1 page, presentation only)
- "NEMO2020" paper submission website: <https://edas.info/N27001>

## Local Events

- West Lake Tour
- Impressive West Lake
- Thousands of Years of Love for Songcheng