

## Resume

### Personal Data

*Name* KIM, Kwang-Yong  
*Position* Emeritus Professor, Department of Mechanical Engineering, Inha University  
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<https://scholar.google.co.in/citations?user=vwfdacgAAAAJ&hl=en>  
[https://www.researchgate.net/profile/Kwang-Yong\\_Kim](https://www.researchgate.net/profile/Kwang-Yong_Kim)  
[www.linkedin.com/in/kwang-yong-kim-5317b074](http://www.linkedin.com/in/kwang-yong-kim-5317b074)  
<https://research.com/u/kwang-yong-kim>  
<https://www.webofscience.com/wos/author/record/AAH-2901-2020>

### Educational Records

1974 – 1978 Seoul National University, Nuclear Engineering, B.S.  
1979 – 1981 Korea Advanced Institute of Science and Technology (KAIST)  
Mechanical Engineering, M.S.  
1984 – 1987 Korea Advanced Institute of Science and Technology (KAIST)  
Mechanical Engineering, Ph. D

### Research Areas

Most of researches were based on ‘Computational Fluid Dynamics’ and ‘Optimization Techniques Using Surrogate Models’ and applied to design of;

- 1) Fluid Machinery
- 2) Micro-Fluidics (Micro-mixers, Micro Heat Sinks, and Micro Fuel Cell)
- 3) Cooling Systems: Turbine blades, Nuclear Reactors, etc
- 4) Heat Transfer Augmentation Devices
- 5) Other Thermo-Fluid Systems

And, PhD thesis was for second-order closure modeling of swirling turbulent flows.

### **Professional Records at Inha University**

March '81 – Present INHA University Incheon Korea

Lecturer (1981 -1982), Instructor (1982 -1984), Assistant Professor (1984-1988),  
Associate Professor (1988-1993), Professor (1993-2021), Inha Fellow Professor (2010-  
2021), Inha Harlim Professor (2021-2022), Emeritus Professor (2022-)

Mar. '17- Feb. '19    Dean, College of Engineering, Inha University  
Mar. '17- Feb. '19    Head, Industrial Science and Technology Research Institute, Inha University  
Mar. '17- Feb. '19    Head, IT New Technology Research Institute, Inha University  
Feb. '09 – Jul. '10    Head, School of Mechanical Engineering, Inha University  
Aug. '08 – Jul. '10    Chairperson, Mechanical Engineering Department, Inha University  
Feb. '02 - Jan. '04    Head, Institute for Mechanical Engineering

### **Visiting Studies at Foreign Universities**

Feb. '05 - Feb. '06    Visiting Scholar, University of Florida  
Research with Prof. W. Shyy and Prof. R. T. Haftka in the area of Design Optimization  
Aug. '97 - Aug. '98    Visiting Scholar, Stanford University/CTR at NASA Ames Research Center,  
Research with Prof. P. Durbin in the area of Turbulence Modeling and CFD  
July '88 - June '89    Visiting Academic, Imperial College, London University,  
Research with Dr. M. M. Gibson in the area of Turbulence Modeling

### **National Orders**

2017.04    Order of Science and Technology Merit, “Doyak Medal”, Republic of Korea  
2021.02    Order of Service Merit, “Yellow Stripes”, Republic of Korea

### **Awards**

2004.11    Namheon Academic Award, Korean Society of Mechanical Engineers (KSME)  
2007.11    Distinguished Service Award, Korean Fluid Machinery Association (KFMA)  
2008.11    Distinguished Academic Award, Korean Society of Mechanical Engineers (KSME)  
2008.12    Excellent Research Award, Inha University  
2009.11    Distinguished Service Award, Korean Society of Mechanical Engineers (KSME)  
2010.08    NCFE Award, National Congress on Fluids Engineering (NCFE)  
2011.11    3<sup>rd</sup> Place at YEP Contest, Fluids Engineering Division, American Society of Mechanical Engineers  
(ASME)  
2015.11    Finalist (4<sup>th</sup> Place) at YEP Contest, Fluids Engineering Division, American Society of Mechanical  
Engineers (ASME)

- 2015.12 Distinguished Academic Award, Korean Society for Fluid Machinery (KSFM)
- 2017.04 Excellent Research Award, Inha University
- 2018.04 Fluids Engineering Academic Award, Korean Society of Mechanical Engineers (KSME)
2019. 09 AFMC Distinguished Engineer Award, Asian Fluid Machinery Committee (AFMC)
2019. 11 Distinguished Service Award, Korean Society for Fluid Machinery (KSFM)
2022. 10 Distinguished Academic Award, Korean Society for Computational Fluids Engineering (KSCFE)

#### **Honorable Memberships**

- 2017 – Present Fellow, The Korean Academy of Science and Technology (KAST)
- 2018 – Present Fellow, The National Academy of Engineering of Korea (NAEK)
- 2018 – Present KISTI Fellow, Korea Institute of Science and Technology Information (KISTI)
- 2008 – Present Fellow, The American Society of Mechanical Engineers (ASME)
- 2009 – Present Associate Fellow, American Institute of Aeronautics and Astronautics (AIAA)

#### **Memberships in Professional Societies**

- 1990 – 2008 Member, The American Society of Mechanical Engineers (ASME)
- 1992 – 2009 Member & Senior Member, American Institute of Aeronautics and Astronautics (AIAA)
- 1980 – Present Member, The Korean Society of Mechanical Engineers (KSME)
- 1996 – Present Member, Korean Society for Fluid Machinery (KSFM), etc.

#### **Leadership in International Societies**

- 2012 – 2017 Chairman, Asian Fluid Machinery Committee (AFMC)
- 2018 – Present Adviser, Asian Fluid Machinery Committee (AFMC)
- 2009 – 2020 Lead Organizer, Symposium on Fluid Machinery ASME Fluids Engineering Division
- 2007 – 2009 Secretary General, Asian Fluid Machinery Committee (AFMC)

#### **Leadership in Domestic Societies**

- 2010 – 2011 President, Korean Society for Fluid Machinery (KSFM)
- 2010 – 2010 Vice President, Fluids Engineering Division, Korean Society of Mechanical Engineers (KSME)
- 2008 – 2009 Chief Vice President, Korean Society for Fluid Machinery (KSFM)
- 2004 – 2007 Vice President, Korean Society for Fluid Machinery (KSFM)
- 1996 – 2001 Chairman of Fan Committee, Korean Society for Fluid Machinery (KSFM)
- 1997 – 2003 Chairman of Technical Committee, Korea, ISO/TC 117 (Industrial Fans)

#### **Activities in International Editorial Boards**

|                |                                                                                    |
|----------------|------------------------------------------------------------------------------------|
| 2021 – Present | Associate Editor, ASME Open Journal of Engineering                                 |
| 2014 – 2020    | Associate Editor, ASME Journal of Fluids Engineering (SCI listed)                  |
| 2008 – 2019    | Editor-in-Chief, International Journal of Fluid Machinery and Systems (IJFMS)      |
| 2018 – Present | Editorial Board Member, Micromachines (SCI listed)                                 |
| 2008 – Present | Member of Advisory Board, JSME Journal of Fluid Science and Technology             |
| 2022 – Present | Topic Collection Editor of ‘Micromixers’, Micromachines (SCI listed)               |
| 2010 – Present | Member of Advisory Board, Journal of Drainage and Irrigation Machinery Engineering |
| 2016 – Present | Editorial Board Member, ChemEngineering                                            |
| 2018 – Present | Advisory Board Member, Sci                                                         |
| 2011 – 2014    | Editorial Board Member, ISRN Chemical Engineering                                  |
| 2009 – 2015    | Editorial Board Member, International Journal of Energy and Technology (IJET)      |
| 2008 – 2014    | Editorial Advisory Board Member, The Open Thermodynamics Journal                   |

#### **Activities in Domestic Editorial Boards**

|             |                                                                                 |
|-------------|---------------------------------------------------------------------------------|
| 2006 – 2009 | Editor-in-Chief, Transactions of Korean Society of Mechanical Engineers (KSME)  |
| 2004 – 2007 | Chairman of Editorial Committee, Korean Society for Fluid Machinery (KSFM)      |
| 2003 – 2006 | Associate Editor, Transactions of Korean Society of Mechanical Engineers (KSME) |
| 2001 – 2003 | Editorial Director, Korean Society for Fluid Machinery (KSFM)                   |

#### **Guest Editors for International Journals**

|            |                                                                                                                            |
|------------|----------------------------------------------------------------------------------------------------------------------------|
| 2019-2021  | Micromachines, Special Issue of ‘Analysis, Design and Fabrication of Micromixers’ I, II                                    |
| 2018-2019  | Micromachines, Special Issue of ‘Optimization of Microfluidic Devices for Biomedical Applications’                         |
| 2017-2018  | Mathematical Problems in Engineering (MPE), Special Issue of ‘Optimization with Surrogate Models: Fluid Flow Application.’ |
| 2017-2018  | Micromachines, Special Issue of ‘Passive Micromixers’                                                                      |
| 2014- 2014 | Guest Editor, ASME Journal of Fluids Engineering                                                                           |
| 2008       | Journal of Fluid Science and Technology, Vol. 3 (2008), No. 6, ‘Special Issue on Asian Now on Fluids Machinery’            |

#### **Directors at Research Centers**

|                 |                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------|
| 2008.12-2013. 8 | Director, High-Efficiency Low-Noise Fans Development Project supported by Ministry of Knowledge Economy, Korea |
| 2012. 9-2015. 2 | Director, High-Efficiency Low-Noise Fans Research Center, Inha University                                      |

### **Chairmen of International Conferences**

- 2007.10 The 9th Asian International Conference on Fluid Machinery (AICFM-9), Jeju, Korea, Chairman of Organizing Committee
- 2011.07 ASME-JSME-KSME Joint Fluids Engineering Conference 2011 (AJK2011), Hamamatsu, Japan, KSME Chairperson
- 2012.12 5th International Symposium on Fluid Machinery and Fluids Engineering, Jeju, Korea, Chairperson of the Symposium
- 2013.09 12<sup>th</sup> Asian International Conference on Fluid Machinery (AICFM), Jogjakarta, Indonesia, Chairperson of Conference
- 2014.10 6<sup>th</sup> International Symposium on Fluid machinery and Fluids Engineering (ISFMFE 2014), Wuhan, China, Co-Chair
- 2015.09 13th Asian International Conference on Fluid Machinery (13th AICFM), Tokyo, Japan, Chairperson of Conference
- 2016.10 7th International Symposium on Fluid Machinery and Fluids Engineering (ISFMFE 2016), Jeju, Korea, Honorary Chairperson of the Symposium
- 2017.10 14th Asian International Conference on Fluid Machinery (AICFM), Jiangsu, China, Chairperson of Conference

### **Committee Members in International Conferences**

- 1996.09 The First International Symposium on Fluid Machinery and Fluid Engineering (ISFMFE), Beijing, P. R. China, International Advisory Committee Member
- 1998.10 The Third International Conference on Pumps and Fans (3rd ICPF), Beijing, P. R. China, International Advisory Committee Member
- 2000.10 The Second International Symposium on Fluid Machinery and Fluid Engineering (ISFMFE), Beijing, P.R. China, International Advisory Committee Member
- 2002.08 The Fourth International Conference on Pumps and Fans (4th ICPF), Beijing, P. R. China, International Advisory Committee Member
- 2002.10 NTHAS3: Third Korea-Japan Symposium on Nuclear Thermal Hydraulics and Safety, KyungJu, Korea, Technical Committee Member
- 2005.10 The 8th Asian International Conference on Fluid Machinery (AICFM-8), Yichang, P. R. China, International Advisory Committee Member
- 2006.09 The First International Symposium on Jet Propulsion and Power Engineering (ISJPPE), Kunming, P. R. China, Scientific Committee Member
- 2006.06 Asian Joint Workshop on Thermophysics and Fluid Science 2006, Qufu, P. R. China, Organizing Committee Member
- 2008.09 The 2nd International Symposium on Jet Propulsion and Power Engineering (ISJPPE), Guilin,

- P. R. China, Scientific Committee Member
- 2008.11 The Second International Symposium on Fluid Machinery and Fluid Engineering (ISFMFE), Beijing, P. R. China, International Technical Committee Member
- 2009.08 International Symposium on Cavitation (CAV2009), Ann Arbor MI, USA, Scientific Committee Member
- 2009.09 International Symposium on Low Carbon Technology (ISLCT), Beijing, China, Organizing Committee Member
- 2010.06 ASME Turbo Expo 2010, Glasgow, UK, Session Organizer; Design Methods & CFD Modeling for Turbomachinery – Optimization (29-7), Axial Flow Fan & Compressor Aerodynamics - Design Analysis or Test (26-3)
- 2010.07 ASME 10th Biennial Conference on Engineering Systems Design and Analysis (ESDA), Istanbul, Turkey, International Program Committee Member
- 2010.08 22nd Symposium on Fluid Machinery at ASME 3rd Joint US-European Fluids Engineering Summer Meeting, Montreal, Canada, Lead Organizer
- 2010.09 The 3rd International Symposium on Jet Propulsion and Power Engineering (ISJPPE), Nanjing, P. R. China, Scientific Committee Member
- 2010.09 25th IAHR Symposium on Hydraulic Machinery and Systems, Timisoara, Romania, Scientific Committee Member
- 2010.10 The 2010 International Conference on Pumps and Fans (ICPF2010), Hangzhou, China, Technical Committee Member
- 2011.06 ASME Turbo Expo 2011, Vancouver, Canada, Session Organizer; Design Methods & CFD Modeling for Turbomachinery - Flow Control (29-9), Optimization 1 - Methods & Design (31-7)
- 2011.07 23rd Symposium on Fluid Machinery and Symposium on Pumping Machinery at AJK2011, Hamamatsu, Japan, Lead Organizer
- 2011.11 International Gas Turbine Congress 2011 (IGTC'11), Osaka, Japan, Session Organizer; Stability Enhancement
- 2011.11 11th Asian International Conference on Fluid Machinery (11th AICFM), Chennai, India, International Advisory Committee Member
- 2012.06 International Symposium on Cavitation (CAV2012), Singapore, Scientific Committee Member
- 2012.06 ASME Turbo Expo 2012, Copenhagen, Denmark, Session Organizer; Design, Analysis, and Test IV (33-4), Optimization 1 - Geometry manipulation and inverse design (35-3)
- 2012.07 24th Symposium on Fluid Machinery at ASME Fluids Engineering Summer Meeting, Puerto Rico, Lead Organizer
- 2012.07 The 1st Korea-Japan Joint Workshop on Fans and Compressors, Tokyo, Japan, Organizer
- 2012.08 26<sup>th</sup> IAHR Symposium on Hydraulic Machinery and Systems, Beijing, China, International Technical Committee Member

2013.05 2013 ICMF(International Conference on Multiphase Flow), Jeju, Korea, Organizing Committee Member

2013.06 ASME Turbo Expo 2013, San Antonio, Texas, USA, Session Organizer; Design, Analysis, and Test IV (35-4), Optimization (37-2)

2013.07 24th Symposium on Fluid Machinery at ASME Fluids Engineering Summer Meeting, Incline Village, Nevada, USA, Lead Organizer

2013.09 6th International Conference on Pumps and Fans (ICPF), Tsinghua University, Beijing, China, Member of International Technical Committee

2014.02 15th International Symposium on Transport Phenomena and Dynamics of Rotating Machinery (ISROMAC-15) Honolulu, HI, USA, Member of Scientific Committee

2014.06 ASME Turbo Expo 2014, Dusseldorf, Germany, Session Organizer of two turbomachinery sessions

2014.08 26th Symposium on Fluid Machinery at ASME Fluids Engineering Summer Meeting, Chicago, USA, Lead Organizer

2015.06 ASME Turbo Expo 2015, Montreal, Canada, Session Organizer; Radial Flow Fans and Blowers I (9-5), Transonic Compressors (37-9), and Seals and Secondary Flows (39-3).

2015.07 27th Symposium on Fluid Machinery and Symposium on Pumping Machinery at AJK2015, Seoul, Korea, Lead Organizer

2015.10 7th International Conference on Pumps and Fans (ICPF2015), Hangzhou, China, Technical Committee Member.

2015.12 International Symposium on Cavitation (CAV2015), Lausanne, Switzerland, Scientific Committee Member

2016.04 The 16th International Symposium on Transport Phenomena and Dynamics of Rotating Machinery (ISROMAC-16), Honolulu, Hawaii, USA, Science & Organizing Committee Member

2016.06 ASME Turbo Expo 2016, Seoul, Korea, Session Organizer; Cascade

2016.07 28th Symposium on Fluid Machinery at ASME Fluids Engineering Div. Summer Meeting, Washington DC, USA, Lead Organizer

2016.10 International Conference on Chemical Engineering (ICCE'16), San Francisco, USA, Conference Committee member

2017.05 10th International Conference on Computational Heat, Mass and Momentum Transfer (ICCHMT 2017), Seoul, Korea, Advisory Committee Member

2017.05 2017 International Conference on Mechanical, System and Control Engineering (ICMSC 2017), St. Petersburg, Russia, Program Committee Chair

2017.07 29th Symposium on Fluid Machinery at ASME Fluids Engineering Div. Summer Meeting, Waikoloa, Hawaii, USA, Lead Organizer

2017.10 The Ninth JSME-KSME Thermal and Fluids Engineering Conference, Okinawa, Japan, International Advisory Committee member

- 2017.10 1st Symposium on Hydraulic Machinery and Systems, Tsinghua University, Beijing, China, Scientific Committee.
- 2017.12 The 17th International Symposium on Transport Phenomena and Dynamics of Rotating Machinery (ISROMAC-17), Maui, Hawaii, USA, Science & Organizing Committee Member
- 2018.04 The 3rd Chinese International Turbomachinery Conference, Chong Qing, China, Conference Committee member
- 2018.07 30th Symposium on Fluid Machinery at ASME Fluids Engineering Div. Summer Meeting, Montreal, Canada, Lead Organizer
- 2019.09 15th Asian International Conference on Fluid Machinery (AICFM), Busan, Korea, Member of International Advisory Committee
- 2021.11 3rd IAHR-Asia Symposium on Hydraulic Machinery and Systems (IAHR-Asia 2021), Kathmandu, Nepal, Member of International Advisory Committee
- 2023.08 4th IAHR Asian Working Group Symposium on Hydraulic Machinery and Systems, Kashgar, P.R.China, Member of IAHR AWG executive Committee

#### **Invited Lectures at Foreign Institutes/International Conferences**

1. Oct. 20, 1995, "Performances of Second-Order Turbulence Closure in The Calculation of Various Shear Flows," Department of Engineering Mechanics, Tsinghua University (invited by Prof. S. Fu), P. R. China
2. Dec. 20, 1995, "Performances of Second-Order Turbulence Closure in The Calculation of Circular Couette Flow," Mechanical Engineering Department, Nagoya Institute of Technology (invited by Prof. O. Kitoh), Japan
3. Oct. 24, 2000, "CFD, Turbulence Modeling and Numerical Optimization for Turbomachinery," Dept. of Jet Propulsion, Beihang University (invited by Dr. Peng Shan), P. R. China
4. Oct. 7, 2003, "Design Optimization of Turbomachinery Using Three-Dimensional Navier-Stokes Analysis," 7<sup>th</sup> Asian International Conference on Fluid Machinery (AICFM7), Fukuoka, Japan, Plenary Lecture
5. Oct. 13, 2005, "Design of An Axial Flow Fan with Shape Optimization," 8<sup>th</sup> Asian International Conference on Fluid Machinery (AICFM8), Yichang, China, Plenary Lecture
6. June 26, 2006, "Shape Optimization of Heat Transfer Augmentation Devices," Asian Joint Workshop on Thermophysics and Fluid Science, Qufu, China, Keynote Lecture
7. Sep. 20, 2006, "Applications of Numerical Optimization Techniques to Design of Axial Compressor Blades," The 1st International Symposium on Jet Propulsion and Power Engineering (ISJPPE-1), Kunming, China, Keynote Lecture
8. Nov. 27, 2008, "Microchannel Heat Sinking: Analysis and Optimization," The 4th International

Symposium on Fluid Machinery and Fluid Engineering, Paper No. 4ISFMFE-IL01, Beijing, China,  
Invited Plenary Lecture

9. Oct. 19, 2010, "Multi-Objective Optimization of a Ventilation Axial-Flow Fan for Performance Enhancement," 2010 International Conference on Pump and Fans (2010 ICPF, Hangzhou, China),  
Invited Plenary Lecture
10. March 10, 2011, "Turbomachinery Research through Collaboration between University and Industry,"  
Asian Aerospace International Expo and Congress 2011, Hong Kong, Keynote speaker
11. Sep. 23, 2011, "Optimization of Film-Cooling Holes Using Surrogate Modeling," The Asian Symposium  
on Computational Heat Transfer and Fluid Flow-2011, Kyoto, Japan, Paper K1-2, Keynote Lecture.
12. Nov. 13, 2011, "Shape Optimization of Casing Treatment for a Transonic Axial Compressor to Improve  
Operating Stability," International Gas Turbine Congress 2011 (IGTC'11), Osaka, Japan, Paper  
IGTC2011-KL-01, Keynote Lecture.
13. Aug. 20, 2012, "Hydrodynamic Performance Enhancement of a Mixed-Flow Pump," 26th IAHR Sym.  
on Hydraulic Machinery and Systems, August 2012, Beijing, P. R. China, Plenary Invited lecture.
14. Aug. 22, 2012, "Optimization of a Novel Film-Cooling Hole for Turbine Blade Cooling," Asian  
Congress on Gas Turbines 2012, Shanghai, P. R. China, Keynote Speech.
15. Aug. 25, 2012, "Shape Optimization of a Film-Cooling Hole for Turbine Blade Cooling" International  
Forum on Fluid Machinery and Engineering, Jiangsu University, Zhenjiang, P. R. China, Invited  
lecture
16. Aug. 1, 2014, "Enhancement of Mixing in Passive Micromixers," AAE Special Seminar, School of  
Aeronautics and Astronautics, Purdue University (invited by AAE Head, Prof. Tom I-P Shih),  
U.S.A.
17. Nov. 12, 2014, "Optimization of Thermo-Fluid Systems Using Surrogate Modeling," Invited Seminar,  
School of Energy and Power Engineering, Xi'an Jiaotong University (invited by Prof. Qiuwang  
Wang), P. R. China.
18. Nov. 12, 2014, "Development of Passive Micromixers," Invited Seminar, School of Energy and Power  
Engineering, Xi'an Jiaotong University (invited by Prof. Qiuwang Wang), P. R. China.
19. Oct. 19, 2016, "Performance Enhancement of Compressors Using Casing Treatment and Air Injection,"  
7th International Symposium on Fluid Machinery and Fluids Engineering (ISFMFE 2016), Jeju,  
Korea, Keynote Lecture 1.
20. May 20, 2017, "Multi-Objective Optimization of an Axial Compressor with Air Injection at Stator  
Shroud," 2017 International Conference on Mechanical, System and Control Engineering (ICMSC  
2017), St. Petersburg, Russia, Plenary Lecture.
21. Nov. 12, 2017, "Development of a Pump Design Software Using Design Optimization," Industrial

Session, 14th Asian International Conference on Fluid Machinery, Zhenjiang, China, Invited Lecture

22. July 31, 2019, "Analysis and Design of Membraneless Microfluidic Fuel Cells, " ASME-JSME-KSME Joint Fluids Engineering Conference 2019 (AJK Fluids 2019), San Francisco, CA, USA, AJKFLUIDS2019-5775, Plenary Lecture
23. Sep. 13, 2021, " Analysis of the Suction Recirculation, Cavitation and Flow Instability in a Centrifugal Pump," The 16th Asian International Conference on Fluid Machinery, Sep. 13-15, 2021, Online, Japan, Plenary Lecture 1.
24. Oct. 18, 2022, "Analysis of the Off-Design Flow Phenomena in a Centrifugal Pump," 13th Asian Computational Fluid Dynamics Conference, Oct. 16-19, 2022, Jeju, Korea, Plenary Lecture 3.
25. Oct. 29, 2022, "Geometric Effects on Flow Instability in a Centrifugal Pump with a Volute," 7th Jin-Shan International Symposium on Fluids Machinery and Engineering (ISFME2022), Online (Jiangsu University), P. R. China, Plenary lecture 1

#### **International Evaluations (except for PhD thesis)**

- 2014.11, 2017.10, 2019.02 International Expert of National Center of Science and Technology Evaluation, Ministry of Education and Science, Astana, Republic of Kazakhstan
2015. 4 Evaluation Expert of Foundation for Science and Technology Development of Ton Duc Thang University (FOSTECT), Vietnam
2018. 9 Evaluation for tenured track Associate Professor Promotions at School of Aerospace, Tsinghua University
2019. 5 Research Proposal Review at United Arab Emirates University (UAEU)

#### **Reviewers for International Journals**

ASME Journal of Fluids Engineering, International Journal of Heat and Fluid Flow, Journal of Nuclear Science and Technology, KSME International Journal, CFD Journal, International Journal of Transport Phenomena, Structural and Multidisciplinary Optimization, International Journal of Thermal Sciences, Journal of Mechanical Science and Technology, International Journal of Rotating Machinery, IMechE Journal of Power and Energy, International Journal of Heat and Mass Transfer, Journal of Enhanced Heat Transfer, Nuclear Engineering and Technology, AIAA Journal of Thermophysics and Heat Transfer, Fluid Dynamics Research, ASME Journal of Heat Transfer, ASME Applied Mechanics Reviews, Lab on a Chip, Engineering Optimization, ASME Journal of Electronic Packaging, Chemical Engineering Journal, Microfluidics and Nanofluidics, Heat and Mass Transfer, AIAA Journal, Micromachines, Chemical Engineering Science, Nuclear Engineering and Design, Heat Transfer Engineering, Scientia Iranica, International Journal of Turbo & Jet Engineering, Journal of Micromechanics and Microengineering,

International Journal for Numerical Methods in Fluids, Journal of Chemical Technology & Biotechnology, Aerospace Science and Technology, Computers and Fluids, International Communications in Heat & Mass Transfer, Journal of Microelectronics and Electronic Packaging, Journal of Propulsion and Power, AIChE Journal, Progress in Computational Fluid Dynamics, Chemical Engineering Research and Design, Energy Conversion and Management, International Journal of Computational Fluid Dynamics, Chemical Engineering Communications, IMechE Journal of Mechanical Engineering Science, Applied Thermal Engineering, Engineering Applications of Computational Fluid Mechanics, Advances in Mechanical Engineering, Flow Turbulence and Combustion, Energy, RSC Advances, Journal of Biomechanics, ASME Journal of Turbomachinery, IEEE Microelectromechanical System, Sensors & Actuators: B. Chemical, Journal of Turbulence, Physics of Fluids, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Chemical Engineering & Technology, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Applied Energy, Biomedical Microdevices, International Journal of Energy Research, International Journal of Environmental Analytical Chemistry, Industrial & Engineering Chemistry Research, Chemical Engineering & Processing

#### **Graduate Students Supervised**

Supervised 23 PhD and 107 master students to completion (16 post-doctoral fellows) (Feb. 2022)

#### **Research Papers in Academic Journals (257 SCI listed, 28 Other International, 141 Korean Domestic)**

1. K. Y. Kim and M. K. Chung, "Computational Study on Turbulent Internal Swirling Flows, " *Journal of the Korean Society for Aeronautical and Space Sciences* (in Korean), Vol. 9, No. 2, Dec. 1981, pp. 61-70
2. Y. C. Cho and K. Y. Kim, "Computation of Turbulent Flows in Axially Rotating Pipe, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 9, Dec. 1981, pp. 1-5
3. K. Y. Kim, "Analytic Solution for Turbulent Flow in Rotating Annulus, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 10, Jun. 1982, pp. 37-42
4. K. Y. Kim, "Viscous Flows in an Annulus with Sudden Expansion, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 11, Feb. 1983, pp. 27-33
5. K. Y. Kim, "Computational Study on Turbulent Flows over a Normal Wall, " *Journal of Solar Energy Society of Korea* (in Korean), Vol. 3, No. 2, Nov. 1983, pp. 29-34
6. K. Y. Kim, "Separated, Turbulent Flows in a Two-Dimensional Channel, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 12, Feb. 1984, pp. 33-37
7. B. J. Chang, K. Y. Kim and Y. C. Cho, "A Numerical Investigation of Separated Turbulent Flows over Circular Disks Normal to A Cylindrical Tube, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 13, Feb. 1985, pp. 415-421
8. Y. C. Cho, K. Y. Kim and M. S. Chi, "Numerical Computation for Turbulent Swirling Flow in Abrupt Circular Channel Expansion, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 14, Feb. 1986, pp. 31-35
9. S. C. Back, K. Y. Kim and Y. C. Cho, "Computation of Turbulent Flows in Swirl Combustor, " *Transactions of the Korean Society of Mechanical Engineers* (in Korean), Vol. 10, No. 4, 1986, pp. 511-518
10. D. G. Yi, K. Y. Kim and M. K. Chung, "Numerical Analysis of Swirling Turbulent Coaxial Jet, " *Journal of the Korean Society for Aeronautical and Space Science* (in Korean), Vol. 14, No. 3, 1986, pp. 12-20
11. K. Y. Kim, "Computational Turbulence Model for Swirling Flows, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 15, Feb. 1987, pp. 75-77
12. K. Y. Kim and M. K. Chung, "New Eddy Viscosity Model for Computation of Swirling Turbulent Flows, " *AIAA Journal*, Vol. 25, No. 7, Jul. 1987, pp. 1020-1022

13. K. Y. Kim and M. K. Chung, " Calculation of Strongly Swirling Turbulent Round Jet with Recirculation by an Algebraic Stress Model, " *The International Journal of Heat and Fluid Flow*, Vol. 9, No. 1, Mar. 1988, pp. 62-68
14. K. Y. Kim and J. H. Choi, " Computational Study on Swirling Turbulent Flow in an Annulus, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 16, Mar. 1988, pp. 51-56
15. S. I. Park and K. Y. Kim, " Computational Study on the Turbulent Boundary Layer on Curved Surface, " *Bulletin of the Institute for Science and Technology* (in Korean), Inha Univ., Vol. 16, Mar. 1988, pp. 57-63
16. Y. C. Cho, K. Y. Kim and S. K. Park, " A Study on the Normal Impinging Jet, " *Journal of the Korean Society for Aeronautical and Space Science* (in Korean), Vol. 17, No. 4, 1989, pp. 1-10
17. K. Y. Kim and M. K. Chung, " Reply by Authors to F. B. Gessner and M. A. Leschziner on New Eddy Viscosity Model for Computation of Swirling Turbulent Flows, " *AIAA Journal*, Vol. 27, No. 9, Sep. 1989, pp. 1305-1306
18. Y. C. Cho, K. Y. Kim and S. K. Park, " A Study on an Oblique Impinging Jet, " *Transactions of the Korean Society of Mechanical Engineers* (in Korean), Vol. 14, No. 3, 1990, pp. 716-724
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