

Moein Mohammadi

Curriculum Vitae

ul. Piotrkowska 7, 02-375 Warsaw, Poland
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Birthdate: 26/3/1990
Nationality: Iranian

Education

- **Ph.D., Atmospheric Physics** 02/2017 – to date
University of Warsaw, Warsaw, Poland
 - Thesis title: Small-scale turbulence and spatial distribution of droplets in clouds (ESR9)
 - Supervisor: Prof. Malinowski

- **M.Sc., Mechanical Engineering (Energy Conversion)** 09/2012 – 11/2014
Iran University of Science and Technology, Tehran, Iran
 - Thesis title: Modeling counterflow combustion of nano-particles
 - Supervisor: Prof. Bidabadi

- **B.Sc., Mechanical Engineering** 09/2008 – 09/2012
Iran University of Science and Technology, Tehran, Iran
 - Thesis title: Hydraulic design of stilling basins
 - Supervisor: Dr. Alizadeh

Research Interests

- Cloud Micro-physics
- Experimental & Theoretical Thermo-fluids
- Multiphase & Turbulent Flows
- Heat & Mass Transfer

Publications

➤ Refereed Journals

Mohammadi, M., Bidabadi, M., Khalili, H., & Poorfar, A. K. (2017). Modeling Counterflow Combustion of Dust Particle Cloud in Heterogeneous Media. *Journal of Energy Engineering*, 143(2), 04016040.

Bidabadi, M., **Mohammadi, M.**, Poorfar, A. K., Mollazadeh, S., & Zadsirjan, S. (2015). Modeling combustion of aluminum dust cloud in media with spatially discrete sources. *Heat and Mass Transfer*, 51(6), 837-845.

Bidabadi, M., **Mohammadi, M.**, Bidokhti, S. M., Poorfar, A. K., Zadsirjan, S., & Shariati, M. (2016). Modeling Flame Propagation of Coal Char Particles in Heterogeneous Media. *Period. Polytech. Chem. Eng.*, 60(2), 85-92.

Bidabadi, M., Ramezanpour, **M.**, **Mohammadi, M.**, Fereidooni, J. (2016). The Effect of Thermophoresis on Flame Propagation in Nano-Aluminum and Water Mixtures. *Period. Polytech. Chem. Eng.*, (60)3, 157-164.

➤ Refereed Conferences

M. Bidabadi, **M. Mohammadi**, Sh. M. Bidokhti, A. K. Poorfar, “Modeling Flame Propagation of Coal Dust Cloud Combustion in Heterogeneous Environment”, *The 5th Fuel & Combustion Conference of Iran*, Iran University of Science & Technology, Tehran, Iran, Feb. 2014.

M. Bidabadi, Y. Pourmohammad, **M. Mohammadi**, A. Esmailnejad, “Analytical solution of aluminum nano-particles counterflow combustion in lean fuel-air mixture”, *The 21st International Conference on Mechanical Engineering*, K. N. Toosi University of Technology, Tehran, Iran, May 2013. (In Persian)

➤ Book

Mohammadi, M. & Bidabadi, M., (2015) “*Particles Cloud Combustion Based On Spray Combustion*” (In Persian). Tehran, Tehran: [Panahgostar Press](#).

Honors & Awards

- Admitted as an “*Outstanding Student*” from Iran University of Science & Technology (IUST) for M.Sc. degree with full scholarship, 2012.
- Entitled as “*Outstanding Student*” in National University Entrance Exam, 2008.
- Honored as “*Elite Student*” in Mazandaran Province by Mazandaran Educational Organization, 2007.
- *Outstanding student Award*, National Organization for Development of Exceptional Talents, 2007.

Languages & Computer Skills

Languages

- **Farsi (Persian):** Mother tongue
- **English:** Professional
- **Arabic:** Elementary
- **French:** Beginner
- **Polish:** Beginner

Test Scores

- **IELTS** Overall Band Score: **6.5** _ CEFR Level: **B2**
- **GRE** Quantitative: **163** _ Verbal: **142** _ Writing: **3**

Computer Skills

- **High-level languages:** C, C++
- **Algorithm development:** MATLAB, Mathematica, Maple
- **Engineering software:** Fluent, Gambit, CATIA, TURBNPRO, Carrier
- **Other softwares:** MS Office, ImageJ

Academic/Professional Experiences

- **Research Assistant** 02/2017- To date
Institute of Geophysics
Faculty of Physics, University of Warsaw
- **Peer Reviewer** 06/2016 -To date
Journal of Energy Engineering (ASCE)
- **Professional Association** 08/2014 –08/2016
Iranian Section of the Combustion Institute (ICI)
- **Research Assistant** 09/2012-03/2015
Combustion Research Laboratory
Department of Mech. Eng., Iran University of Science and Technology
- **Apprenticeship** 06/2011 - 09/2011
Babol Machine Manufacturing & Industrial Company

Remarkable Courses & Projects

M.Sc.

- Particles Combustion 18.5/20 (2nd top mark) Prof. Bidabadi Spring 2013
- Advanced Fuel & Combustion 19.5/20 (1st top mark) Prof. Bidabadi Fall 2012
- Designing a Francis hydro turbine (163MW) with TURBNPRO and CATIA:
Advanced Hydro-powerplant Dr. Drakhshan Spring 2014
- A thorough study on Effect of discreteness on heterogeneous flames:
Advanced Fuel & Combustion Prof. Bidabadi Fall 2012

B.Sc.

- Hydraulic Machines 18/20 (2nd top mark) Dr. Drakhshan Fall 2011
- Heat Transfer I 18/20 (1st top mark) Prof. Shojaeefard Spring 2011
- Mechanical Eng. Design I 18.5/20 (2nd top mark) Dr. Gohari Spring 2010
- Fundamentals of Electrical Eng. I 19/20 (1st top mark) Dr. Moosapour Fall 2009
- Designing an automobile chassis and body parts with CATIA:
Technical Drafting II Dr. Poorbashiri Spring 2011

References

Prof. Mehdi Bidabadi
Department of Mechanical Engineering
Iran University of Science & Technology
Email: bidabadi@iust.ac.ir
<http://www.iust.ac.ir/find-16.1527.960.en.html>

Dr. Mansour Alizadeh
Department of Mechanical Engineering
Iran University of Science & Technology
Email: ma_alizadeh@iust.ac.ir
<http://www.iust.ac.ir/find-16.1520.958.en.html>

Dr. Shahram Derakhshan
Department of Mechanical Engineering
Iran University of Science & Technology
Email: shderakhshan@iust.ac.ir
http://www.iust.ac.ir/page.php?slct_pg_id=9893&sid=16&slc_lang=en