

CURRICULUM VITAE

DR.MERAA ARAB

CONTACT INFORMATION

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PERSONAL INFORMATION

Name: Dr. Meraa Arab

Sex: Male

Date of Birth: 09 July 1975

Citizenship: German

EDUCATION AND EMPLOYMENT

2015-now Assistant Professor at KFU Saudi Arabia

2011 – 2015 Scientific Researcher

Humboldt-University of Berlin

August 2014 PH.D in Mathematics (Dr.rer.nat)

Humboldt-University of Berlin

January 2008 –July 2010: Scientific Researcher

Humboldt-University of Berlin

Project: Nano-coated metal for bipolar plates of PEFC:

Modeling and simulation of multi-scale equations

October 2002 – 2007: Master Degree Program CSE'Computational Sciences in Engineering

Braunschweig University of Technology, Germany

1995 – 1999: B.Sc.Mathematics/ Informatics

Aleppo University, Syria

TEACHING EXPERIENCE

2008 – Scientific Researcher

Humboldt University of Berlin,

2002 – 2007: Student Researcher at Braunschweig University of Technology, Germany

2001 – 2002: Alqunfudah University, Saudi Arabia

Assistant

1999 – 2001: Aleppo University, Syria

Assistant at Science Faculty

Other skills

Mother Tongue: Arabic

Other Languages

English: Very good (Speaking and Writing)

German: Speaking Very good, Writing Good

COMPUTER SKILLS

Matlab, C++, UG (Unstructured Grid)

Competent with all Microsoft programs

PUBLICATIONS (RELATED TO PROJECTS)

[1] J. Geiser and M.Arab.

Modelling of Chemical Vapor Deposition: Meso and Microscale Model.

International Journal of Applied Mathematics and Mechanics

(IJAMM), Hong Kong, China, March, 2008.

[2] J. Geiser and M.Arab.

Modelling, Optimization and Simulation for a Chemical Vapor Deposition.

Journal of Porous Media, Begell House Inc., Redding, USA, June, 2008.

[3] J. Geiser and M.Arab.

Simulation for Chemical Vapor Deposition: Thin-layer geometry.

International Journal of Applied Mathematics and Mechanics (IJAMM), Hong Kong, China, October, 2008.

[4] J. Geiser and M.Arab.

Simulation of a Chemical Vapor Deposition: Mobile and Immobile Zones and Homogeneous Layers.

Journal of Porous Media, Begell House Inc., Redding, USA, March 2009.

[5] J. Geiser and M.Arab.

Simulation for chemical vapor deposition: multiple channel geometry.

Far East Journal of Mathematical Sciences (FJMS), Pushpa Publishing

House, Allahabad, India, April 2009.

[6] J. Geiser and M.Arab.

Porous Media Based Modeling of PE-CVD Apparatus: Electrical fields and Deposition Geometries. Special Topics and Reviews in Porous Media,

Begell House Inc., Redding, USA, Vol. 1, iss. 3, 2010.

[7] J. Geiser, V- Buck and M.Arab.

Model of PE-CVD apparatus: Verification and Simulations, Mathematical Problems in Engineering,

Hindawi Publishing Corp., New York, April 2010.

[8] J. Geiser and M.Arab.

Modelling and Simulation of a Chemical Vapor Deposition.

Journal of Applied Mathematics, special issue: Mathematical and Numerical Modeling of Flow and Transport (MNMFT), Hindawi Publishing Corp., New York, vol. 2011, Article ID 641920, 25 pages, 2011. doi:10.1155/2011/641920

[9] J. Geiser and M.Arab.

Optimal Deposition Geometry and Simulation of PE-CVD Apparatus based on a porous media.

International Journal of Applied Mathematics and Mechanics (IJAMM), Hong Kong, May 2011.

[10] J. Geiser and M.Arab.

Simulation of a Chemical Vapor Deposition: Four phase model.

Special Topics and Reviews in Porous Media,

Begell House Inc., Redding, USA June 2011.

Workshops.

[1] 25.01.08. Berlin, Germany

Modelling, Discretization and Optimization of CVD-Processes.

[2] 10.03.2008. Berlin, Germany

Simulation of a CVD-processes with UG Software.

[3] 16.06.2008. Graebner. Netphen-Werthenbach, Germany.

Simulation of a CVD-processes with multiple sources.

[4] 29.01.2009. Dortmund, Germany

Talking state 6: Presentation of the project's progress

[5] 16.04.2009. Duisburg, Germany

Simulation of Chemical Vapor Deposition, Model and Experiments.

[6] 23.06.2009. Duisburg, Germany

Talking state 7: Presentation of the project's progress

[7] 10.2009. Berlin, Germany

Talking state 8: Working in the field of modeling and simulation the coating[8]
12.12.2009. Berlin, Germany

Poster: Scientific Meeting of Syrian Students in Germany

[9] 3.02.2010. Netphen, Germany

Status conversation 9: Project advances in modeling and simulation

[10] 06.2010. Dortmund, Germany

Status conversation 10: Project advances in modeling and simulation.

[11] 09.2010. Schwaebisch Gmuend, Germany Talking state 11: successes and overview
of modeling and simulation

Presentations at international conferences:

[1] 15-18.2008. Innsbruck at October

Modeling, Optimization and Simulation for Chemical Vapor Deposition.

[2] May 25-28, 2010. Technical University of Dresden, Germany

8th AIMS International Conference on Dynamical Systems. Multiphase
Models solved by Operator Splitting Methods.

Books :

[1] Simulation of Deposition Processes with PECVD Apparatus: Theory
and Applications, Monograph, Series: Physics Research and
Technology,

J.Geiser and Meraa Arab.

Nova Science Publishers