Ahmad Sakhrieh

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Born on June 30th , 1972 Jordanian

American University of Ras Al Khaimah, School of Engineering, Mechanical and Industrial Engineering Department, UAE

Education:

• **Ph.D. in Mechanical Engineering (Combustion),** Lehrstuhl Für Technische Thermodynamik Friedrich-Alexander University, Erlangen-Nürnberg, Germany, 2006.

Thesis: Reduction of Pollutant Emissions from High Pressure Flames using an Electric Field.

- **M.Sc. in Mechanical Engineering**, Jordan University, Jordan, 1997. Thesis: Inhibition of Dust Explosion.
- **B.Sc. in Mechanical Engineering**, Jordan University, Jordan, 1995. Graduation Project: Solar Bonds.
- High School, Mo'awiah Ben Abi Sofian, Jordan, 1990.

Experience:

Professor	Mechanical and Industrial Engineering Department, American University of Ras Al Khaimah (July 2018-present)
Chairman	Mechanical and Industrial Engineering Department, American University of Ras Al Khaimah (August 2016-present)
Associate Professor	Mechanical and Industrial Engineering Department, American University of Ras Al Khaimah (Sept. 2015-July. 2018)
Chairman	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Sept. 2014-Sept. 2015)
Associate Professor	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Sept. 2012-Present)

Assistant Professor	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Feb. 2009-Sept.2012)
Full time lecturer	Mechanical Engineering Department, the Hashemite University, Zarqa, Jordan (Sept. 2007-Jan. 2009)
Full time Lecturer	Jordan Academy for Maritime Studies, Amman, Jordan (Oct. 2006- Sept. 2007)
Part-time Lecturer	Mechanical Engineering Department, the Hashemite University, Zarqa, Jordan (Sept. 2006-Feb. 2007)
Full-time Lecturer	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Sept. 1998- April 2002)
Part-time Lecturer	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Sept. 1997- July 1998)
Teaching Assistant	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Sept. 1996- July 1997)
Research Assistant	Mechanical Engineering Department, The University of Jordan, Amman, Jordan (Sept. 1995- Sept. 1996)

Courses taught:

Engineering Drawing and Descriptive Geometry, Thermodynamics, Fluid Mechanics, HVAC (Heating Ventilating and Air Conditioning), Heat Transfer, Safety Management Systems, Thermal Sciences, Measurements, Computer Aided Design, Numerical Analysis, Internal Combustion Engines, Turbomachinery, Built Environment, Computer Applications, Engineering Mechanics, Design of Thermal Systems, Energy Management, Energy Efficiency.

Scientific Journals:

Reviewer for International Journals: Applied Thermal Engineering, Energy Conversion & Management, Sustainable Cities and Society, Journal of Energy, Jordan Journal for Mechanical and Industrial Engineering, Journal of Infrastructure Systems.

Guest Editor: Sustainable Cities and Society

Training

Photovoltaic systems,

A training course held for engineers from Iraq in the field of photovoltaic systems, design installation, off-grid and on-grid connection, Amman-Jordan

Power Plants for engineers

A training course in the field of power plants. Power Plants Cycles, Calculations, and types. The training course was conducted for Saline Water Conversion Corporation, Saudi Arabiya.

Awards:

- Jordanian Ministry of high Education, Distinction Scholarship for undergraduate study
- DAAD full scholarship for PhD Study.
- DFG (German Research Foundation) research grant for three months, 2008 and 2009, 2010, 2011, 2012, 2014 and 2015.
- Elected out of 320 applicants from 22 countries as a Member in Arab German Academy for Science and Humanities (AGYA).

Research Grants:

- MAster Program of Environmental engineering and Climate change. TEMPUS University of Jordan, July. 2010 July 2012, 56,500 JD.
- Sustainable Mediterranean Old Towns, ENPI-EU, 2 years (January 2014 December 2015), EU, 3 years (started from 15-10-2011), 1,005,683.05 Euro.
- Master on Sustainable Development and Renewable Energy, TEMPUS –EU, 3 years (started from 15-10-2010), 1,135, 176.00 Euro.
- Utilization of Oil Shale as a Source of Energy in Jordan; Direct Burning and Shale Oil Extraction Phase I, Scientific Research Fund, 235,500 JD.
- Experimental Investigation of Solar Cooling Technique, Deanship for Scientific research in the 1,324,506 Euro.

Activities:

- Chair of the organizing committee of International Conference on Energy, Water & Environmental Sciences (ICEWES) conference, 13-15 November 2018.
- Arab German Young Academy co-president (October. 2016-November 2017).
- Chair of the organizing committee of the International Conference on Energy, Water & Environmental Sciences (ICEWES 2018), November 13-15, 2018.
- Chair of School of Engineering ABET committee since November 2016.
 - Prepared the Mechanical and Industrial Engineering Applications that has been submitted for ABET on June 28, 2017
- Chair of Senior Design Project Committee since November 2016.
 - Prepared the guidelines, evaluation rubric and forms and SDP template.
- Member in AURAK Zero Energy House.

- Secured fund (35000 Euro) and chaired the organizing committee of The Forum for Students Inventions "Entrepreneurship and innovation challenges in the 21stcentury" in cooperation with Arab universities Association and Arab German Young Academy, 12-15 November 2017.
- Initiated the Idea and chaired the organizing committee of AURAK renewable energy competition. The first competition was held on 16 January 2017. The second competition will be held on 7 February 2018.
- Member of the organizing committee of International Conference on Energy, Water & Environmental Sciences (ICEWES) conference, 15-17 December 2015.
- Secured fund (20000 Euro) from German research foundation to hold the workshop Energy and Water in the Gulf Cooperation Council Countries (EWGCC)" at AURAK. I served also as a chair of the organizing committee for this workshop.
- Secured fund (25000 Euro) from Arab German Young Academy for sciences and humanities to hold the workshop "Boosting opportunities awareness for women in STEM education and career pathway: Boosting Opportunities and Awareness" at AURAK, 13-16 January 2017
- Participated in **running** the 2nd and 3rd Engineering camps.
- Invited speaker in PHI's research and innovation Summit, 24-26 August 2017.
- Initiated the idea of "science film festival" that will be held at AURAK, 24-28 October 2017.
- Member of the organizing committee of the second Jordanian international conference for mechanical engineering, Amman, Jordan, 1997.
- Member of the organizing committee of the international conference for energy systems, Amman, Jordan, 2000.
- Member of the organizing committee for the 2nd and 3rd Global Conference on Renewable Energy Approaches for Desert Regions, Amman 2009 and 2011.
- Member of the organizing committee of 4th Jordanian IIR International Conference on Refrigeration and Air Conditioning.
- Member of the organizing committee of Al-Zaytoonah University International Conference on Design and Innovation in Infrastructure 2012.
- Supervised/co-supervised over 20 final year B.Sc. projects, 10 M.Sc. and 1 Ph.D. students.
- Member of The American Society of Mechanical Engineers (ASME)
- Member in Jordan engineering association.
- Member in youth and childhood cultural association.

Publications:

1. A. Sakhrieh, G. Lins, F. Dinkelacker, T. Hammer, A. Leipertz, D. W. Branston, Pressure Influence on Electric Field Control of Premixed Turbulent Flames, Trends in numerical and physical modeling for turbulent processes in gas turbine combustors, Heidelberg, Germany, April 2004.

- 2. A. Sakhrieh, G. Lins, F. Dinkelacker, T. Hammer, A. Leipertz, D. W. Branston, **Electric Field Control of a Premixed Turbulent Flame at High Pressure**, 30th International symposium on combustion, Poster session, July 2004.
- T. Hammer, G. Lins, A. Sakhrieh, F. Dinkelacker, D. W. Branston, A. Leipertz, Electric Field Control of Premixed Methane-Air Combustion at High Pressure, 5th Electro hydrodynamics International Workshop, Poitiers (France), August 30-31, 2004.
- A. Sakhrieh, G. Lins, F. Dinkelacker, T. Hammer, A. Leipertz, D. W. Branston, Electric Field Control of a Premixed Turbulent Flame at High Pressure, Book of abstracts of the European Combustion meeting 2005, Louvain-la-Neuve, Belgium, April 3-6, 2005.
- A. Sakhrieh, G. Lins, F. Dinkelacker, T. Hammer, A. Leipertz, D. W. Branston, Influence of the Electric Field on Premixed Turbulent Flames at Elevated Pressure, First middle east international conference on advances in civil, mechanical and materials engineering, Amman, Jordan, May 2005.
- R. Al_Tarawneh, A. Sakhrieh, Neural Network Application in the Study of Solid Fuel Dust Explosion, First middle east international conference on advances in civil, mechanical and materials engineering, Amman, Jordan, May 2005.
- T. Hammer, G. Lins, D. W. Branston, F. Dinkelacker, A. Sakhrieh, A. Leipertz, Electro-hydrodynamic Control of Premixed Turbulent Methane Flames at Pressures Above 1 atm, Proceedings of ASME Turbo Expo 2005 Power for Land, Sea, and Air, Nevada, USA, June 6-9, 2005.
- 8. A. Sakhrieh, G. Lins, F. Dinkelacker, T. Hammer, A. Leipertz, D. W. Branston, **The Influence of Pressure on the Control of Premixed Turbulent Flames Using an Electric Field**, Combustion and flame, 143, 313-322, 2005.
- M. A. Hamdan, A. Sakhrieh, Dust Explosion of Oil Shale and Olive Cake Solid Fuels: a Comparison Study, International Journal of Energy Research, 29, 871-878, August 2005.
- G. Lins, F. Dinkelacker, T. Hammer, A. Sakhrieh, L. Sun, Verbrennungssteuerung mittels elektrischer Felder, Workshop Plasmatechnik, 22. - 23. Juni 2006, Ilmenau, Hrsg. B. Dzur, pp.67-74.
- 11. F. Beyrau, A. Sakhrieh, F. Altendorfner, A. Leipertz, T. Hammer, G. Lins und F. Dinkelacker, Einsatz von elektrischen Feldern zur Stabilisierung von Hochdruckflammen, VDI-Thermodynamik-Kolloquium, Dortmund, October 2006, Tagungsband TD-8
- 12. A. Sakhrieh, F. Altendorfner, F. Beyrau, A. Leipertz, F. Dinkelacker, T. Hammer, G. Lins and D. W. Branston, NOx Reduction in Turbulent Methane-Air Flames Stabilized by a DC Electric Field at High Pressure, 31st International Symposium on Combustion, Heidelberg, Germany, August 2006.

- 13. A. Sakhrieh, F. Altendorfner, F. Beyrau, A. Leipertz, F. Dinkelacker, T. Hammer, G. Lins and D. W. Branston, The Effect of Electric Fields on CO Emission of a Premixed Flame at Elevated Pressure: Optimization of Field Geometry, 31st International Symposium on Combustion, Heidelberg, Germany, August 2006
- 14. F. Altendorfner, A. Sakhrieh, F. Beyrau, A. Leipertz, F. Dinkelacker, G. Lins, T. Hammer & D. W. Branston, Electric Field Effects on Emissions and Flame Stability with Optimized Electrical Field Geometry, Book of abstracts of the European Combustion meeting 2007, Mediterranean Agronomic Institute of Chania Crete, Greece, April 11-13.
- 15. F. Altendorfner, F. Dinkelacker, Th. Hammer, Th. Kappes, G. Lins, A. Sakhrieh, Lin Sun, M. Vega, Plasma- and Electric Field Control of Natural Gas Combustion, Transactions of the Institute of Fluid-Flow Machinery, Polish Academy of Sciences, No. 119, 5-16, 2007.
- 16. A Sakhrieh, RH Fouad, JA Yamin, Experimental Study of Using Emulsified Diesel Fuel on the Performance and Pollutants Emitted from Four Stroke Water Cooled Diesel Engine, Power Control and Optimization: Proceedings of the Second Global Conference on Power Control and Optimization, bali, Indonesia, 1-3 June, 2009.
- I. Al-Hinti, M. Samhouri, A. Al-Ghandoor, A. Sakhrieh, The Effect of Boost Pressure on the Performance Characteristics of a Diesel Engine: a Neuro-Fuzzy Approach, Applied Energy, Volume 86, Issue 1, 113-121, 2009.
- A. Sakhrieh, E. Abu-Nada, I. Al-Hinti, A. Al-Ghandoor, B. Akash, Computational Thermodynamic Analysis of Compression Ignition Engine, International Communications in Heat and Mass Transfer 37, 299–303, 2010.
- 19. A. Sakhrieh, E. Abu-Nada, B. Akash, I. Al-Hinti, A. Al-Ghandoor, Performance of Diesel Engine using Gas Mixture with Variable Specific Heats Model, Journal of the Energy Institute, Volume 83, 217-224, 2010.
- 20. A. Sakhrieh, M. A. Hamdan, Inhibition of Solid Fuel Dust Explosion by Burning Mixtures of Coarse and Fine Particles, Jordan Journal of industrial and mechanical engineering, Volume 4, Number 2, March, 300 – 303, 2010.
- A. Al-ahmar, J. Yamin, A. Sakhrieh, M. A. Hamdan, Engine Performance using Emulsified Diesel Fuel, energy conversion and management, Volume 51, Issue 8, 1708-1713, 2010.
- 22. R. Haj Khalil, A. Sakhrieh, M.A.Hamdan, J. Asfar, Effect of Pressure and Inlet Velocity on the Adiabatic Flame Temperature of a Methane-air Flame, Jordan Journal of industrial and mechanical engineering, Volume 4, Number 1, Jan, 21-28, 2010.
- 23. A. Abu Raed, A. Sakhrieh, Green Building for Low Income People, international engineering conference on hot arid regions, May 1-2, Alahsa, Saudi Arabia, 2010.
- 24. A. Abu Raed, A. Sakhrieh, **Research on Transforming a Residential into a** Green Building under Jordanian Climate Conditions The 2011 International

Conference on Water, Energy and the Environment, AUS, November 14 - 17, 2011.

- 25. Al-Hinti, A. Al-Ghandoor, A. Sakhrieh, B. Akash, E. Abu-Nada, A Comparative Analysis of Energy Indicators and CO₂ Emissions in 15 Arab Countries, Int. J. of Environment and Waste Management, Vol.11, No.2, 129 147, 2013.
- A. Sakhrieh, M. Hamdan, Utilization of Jordanian Oil Shale, Proceedings of the Fifth Global Conference on Power Control and Optimization, Dubai United Arab Emirates, June 1-3, 2011.
- 27. A. Sakhrieh, Experimental Study on Exhaust Gas after Treatment using Limestone, Thermal Science, Vol. 17, No. 1, 49-56, 2012.
- A. Sakhrieh, A. Al-Ghandoor, Experimental Investigation of the Performance of Five Types of Solar Collectors, Energy Conversion and Management 65, 715–720, 2013.
- 29. Y. Abdullat, M. Hamdan, E. Abdelhafez, A. Sakhrieh, Development of Neural Networks for Enhancement of Thermal Energy Storage using Phase Change Material, Int. J. of Thermal & Environmental Engineering 5, No. 2, 167-173, 2013.
- A. Fasfous, J. Asfar, A. Al-Salaymeh, A. Sakhrieh, Z. Al_hamamre, A. Albawwab, M. Hamdan, Potential of Utilizing Solar Cooling in The University of Jordan, Energy Conversion and Management 65, 729–735, 2013.
- 31. A. Sakhrieh, A. Al-Salaymeh, Experimental and Numerical Investigations of Salt Gradient Solar Pond under Jordanian Climate Conditions, Energy Conversion and Management 65, 725–728, 2013.
- 32. A. Jaber, L. Zigan, A Leipertz, A Sakhrieh, Laser-Induced Phosphorescence in Combustion Diagnostics: Calibration at Extremely High Temperatures, 11th Int. Conference on Combustion and Energy Utilization (ICCEU), Coimbra, Portugal, May 09 – 13, 2012.
- 33. A. Jaber, L. Zigan, A Sakhrieh A Leipertz, Surface Temperature Distribution Remote Phosphor Thermometry of a Porous Media Burner Using Laser-Induced Phosphorescence Intensity Measurements, 30th International symposium on combustion, Poster session, July 2012.
- 34. A. M. Abd -Alfattah, A. Gandour and A. Sakhrieh, Electricity And Environmental Impacts by Implementing Energy Efficiency Standards and Labels for Electrical Appliances in Jordan, Design and Innovation in Infrastructure 2012 - ZEC Infrastructure 18-20 June, Amman, 2012.
- 35. A. Abd alfattah, A. Sakhrieh, A. Gandour, Introduction Energy Efficiency Standards and Labels for Cold Appliances in Jordan, 4th. JIIRCRAC 2012, Amman-Jordan, Sept. 10th – 12th, 2012.

- 36. A. Sakhrieh, W. Al-Azhari K. Yaseen, N. Touqan, A. Zakarneh, A. Al-Zamer, Case Study of Green Energy System Design for Cinematic Art Institute, 4th. JIIRCRAC 2012, Amman-Jordan, Sept. 10th – 12th, 2012.
- 37. A. Jaber, L. Zigan, A. Sakhrieh, A. Leipertz, Laser-Induced Phosphorescence Applications in Surface Temperature Measurements of a Porous Media Burner, Proceedings of the European Combustion Meeting, 2013.
- 38. A. Jaber, L. Zigan, A. Sakhrieh, A. Leipertz, Surface Temperature Measurements in a Porous Media Burner using a New Laser-Induced Phosphorescence Intensity Ratios Technique, Meas. Sci. Technol. 24, 2013.
- 39. A. Sakhrieh, R. Baltawi, H. Basheer, A. Hammad, Energy Audit for the Department of Statistics, International Conference on Renewable Energy and its Future in the Arab World 2013, 22-24 April 2013.
- 40. R. Awwad, A. Sakhrieh, Investment Potentials of Conversion to Energy Efficient Buildings in the Housing Industry in Jordan, International Conference on Renewable Energy and its Future in the Arab World 2013, 22-24 April 2013.
- 41. J. Yamin, N. Sakhnini, A. Sakhrieh, M.A. Hamdan, Environmental and Performance Study of a 4-Stroke CI Engine Powered with Waste Oil Biodiesel, Sustainable Cities and Society, Volume 9, 32–38, 2013.
- 42. J. Al Asfar, A. Hammad, A. Sakhrieh, M. A. Hamdan, **Two-Dimensional Numerical Modeling of Combustion of Jordanian Oil Shale,** Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, In Press.
- 43. AS Hejab, AH Sakhrieh, Energy Savings Potential Associated with Reactive Power in Water Pumping Systems, Int. J. of Thermal & Environmental Engineering, Int. J. of Thermal & Environmental Engineering, Volume 11, No.1 (2016) 61-65.
- 44. Sakhrieh A., Abdullat Y., Hamdan M.A., Enhancement of thermal energy storage using phase-change material under Jordanian climate, Journal of Infrastructure Systems 22, 4, 2016
- 45. K. Hassouneh, A. Al-Salaymeh, and A. Sakhrieh, **Performance of World Health Organization as a Green Building,** Int. J. of Thermal & Environmental Engineering, Volume 11(1), pp. 41-46, 2016.
- 46. Al Asfar J.J., Hammad A., Sakhrieh A., Hamdan M.A., **Two-dimensional numerical modeling of combustion of Jordanian oil shale**, Energy Sources, Part A: Recovery, Utilization and Environmental 38, 9, 1189-1196, 2016.

- 47. Ahmad Sakhrieh, Waleed Shreim, Hatem Fakhruldeen, Hasan Hasan, Ahmed Al-Salaymeh, Combined Solar-Geothermal Power Generation using Organic Rankine Cycle, Jordan Journal of Mechanical and Industrial Engineering, Volume 10 Number 1, March.2016, Pages 1-9
- 48. Ahmad Sakhrieh, **Energy Analysis for GCC Countries**, 5th global conference on renewables and energy efficiency for desert regions, April 4-6, 2016, Amman, Jordan.
- 49. Asal Ibrahim, Ahmad Sakhrieh, **Comparative Study of Fresnel Lenses and Mirrors in Concentrated Solar Applications**, 5th global conference on renewables and energy efficiency for desert regions, April 4-6, 2016, Amman, Jordan.
- 50. Sakhrieh A.H., Al-Hares A.N., Faqes F.A., Al Baqain A.S., Alrafie N.H., **Optimization of oxyhydrogen gas flow rate as a supplementary fuel in compression ignition combustion engines,** International Journal of Heat and Technology 35, 1, 116-122, 2017.
- 51. Mkhaimer L.G., Arafeh M., Sakhrieh A.H., Effective implementation of ISO 50001 energy management system: Applying Lean Six Sigma approach, International Journal of Engineering Business Management 9, 1-12, 2017.
- 52. Sakhrieh A.H., Alamir A.I., Hindiyeh M.Y., **Water disinfection using CSP technology**, International Journal of Applied Engineering Research 11, 15, 8673-8680, 2016.
- 53. Öztop H.F., Sakhrieh A., Abu-Nada E., Al-Salem K., Mixed convection of MHD flow in nanofluid filled and partially heated wavy walled lid-driven enclosure, International Communications in Heat and Mass Transfer 86, 42-51,2017.
- 54. Mohsin L., Sakhrieh A., Aboushi A., Hamdan A., Abdelhafez E., Hamdan M., Optimized cleaning and cooling for photovoltaic modules based on the output performance, Thermal Science, 2016, <u>https://doi.org/10.2298/TSCI151004145M</u>.
- 55. Alwiyah Abd Alfattah, Ahmad Sakhrieh, Ahmed Al-Ghandoor, Energy Efficiency Standards and Labels for Cold Appliances in Jordan, International Journal of Energy Economics and Policy, 2017, 7(3), 95-101
- 56. JJ Al Asfar, A AlShwawra, A Sakhrieh, MA Hamdan, **Combustion characteristics of solid waste biomass, oil shale, and coal**, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Volume 40 (3), 335-342.

- 57. R Al-Rbaihat, A Sakhrieh, J Al-Asfar, A Alahmer, O Ayadi, A Al-Salaymeh, Performance Assessment and Theoretical Simulation of Adsorption Refrigeration System Driven by Flat Plate Solar Collector, Jordan Journal of Mechanical and Industrial Engineering, Volume 11(1), 1-11, 2017.
- 58. Ali Almarzouq, Ahmad Sakhrieh, Effect of glazing design and infiltration rate on energy consumption and thermal comfort in residential buildings, Thermal Science, DOI REFERENCE: https://doi.org/10.2298/TSCI170910073A
- 59. Mohammad A. Hamdan, Eman M. Alqallab, Ahmad H. Sakhrieh, **Potential of Solar Cells Performance Enhancement using liquid Absorption Filters**, Iranian Journal of Science and Technology, Transactions of Mechanical Engineering, Accepted for Publication.

1. Conferences

- First international workshop on trends in numerical and physical modeling of turbulent processes in gas turbine combustors, 14-15 November, 2002, Darmstadt, Germany.
- Kurzlehrgang, Grundlagen und Moderne Anwendungen der Verbrennungstechnik, 16-19 February 2004, Universität Erlangen-Nürnberg, Germany.
- Second international workshop on trends in numerical and physical modeling of turbulent processes in gas turbine combustors (and automotive engines), 1-2 April 2004, Heidelberg, Germany.
- European Combustion Meeting "ECM2005", 3-6 April 2005, Louvain-la-Neuve, Belgium.
- First Middle East international conference on advances in civil, mechanical and materials engineering, 10-13 May, 2005, Amman, Jordan.
- Second Global Conference on Power Control and Optimization PCO 2009, June 1-3, 2009, Bali, Indonesia.
- Global Conference on Renewables and Energy Efficiency for DEsert Regions 2009, March 31st - April 2nd, 2009, Amman – Jordan
- Global Conference on Renewables and Energy Efficiency for DEsert Regions 2011, April 26 April 28, 2011, Amman Jordan.
- Fifth Global Conference on Power Control and Optimization PCO 2011, June 1-3, 2009, Dubai, United Arab Emirates.

Computer

Solid knowledge in Windows and Microsoft applications, Engineering Software, Graphic and Multimedia Applications and Computer Hardware.

References

- Prof. Dr.-Ing. Martin Kaltschmitt Hamburg University of Technology Environmental Technology and Energy Economy Eißendorfer Straße 40 (N) 21073 Hamburg Phone: +49 40 428 78 30 08 Fax: +49 40 428 78 23 15 Email: <u>kaltschmitt@tuhh.de</u>
- 2. Prof. Bilal Akash

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