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## **GENERAL INFORMATION**

**Romania**: A sovereign state located in Southeastern Europe. Surface: 238,391 km<sup>2</sup>, 19,830,000 inhabitants.

**Iaşi:** Located at the north-east of Romania, former capital of Moldova (1564-1859), altitude: 75 m, surface: 94 km<sup>2</sup>, 290,422 inhabitants (in the metropolitan area: 472,000 inhabitants).

"Gheorghe Asachi" Technical University of Iaşi, Romania: founded in 1813 (1937), 11 faculties, 17,095 students, 750 teachers, official web page: www.tuiasi.ro

**Faculty of Machine Manufacturing and Industrial Management**: founded in 1990, 1100 students, 67 teachers, official web page: http://cmmi.tuiasi.ro/en/home/

**Department of Machine Manufacturing Technology:** one of the 5 departments of the Machine Manufacturing and Industrial Management Faculty, 13 laboratories (machine manufacturing technology, CAD, advanced manufacturing technologies, cold plastic deformation technologies, welding processes theory, welding engineering and reconditioning, nonconventional technologies, numerical modelling, fundamentals of experimental research, design of technologies applied on flexible systems, automation and robotics of technological processes, technology of repairing and assembling, fine mechanics and nanotechnologies), 19 teachers, location in blvd. D. Mangeron, 39 A, official web page: http://cmmi.tuiasi.ro/departament-tcm/

**Taxi:** colored in yellow. Phone numbers: 0232 255 255, 0740 255 255, 0728 255 255, 0766 255.255, 0740 217 217, 0720 217 217, 0765 217 217, 0232 222 444, 0721 222 444, 0743 222 444, 0332 405 444, 0232 22 22 22, 0745 777 222, 0332 401 222, 0724 777 222, 0742 941 941, 0722 941 941, 0232 941, 0332 411 941.

**To travel from the city center to the TCM Department:** buses 42, 43, 46 and trams 7 or 8 (arriving to a station at about 1.1 km from the TCM department, near the "Tudor Vladimirescu" Students Campus).

**To travel from TCM Department in the direction of the city center**: buses 42, 43, 46 and trams 7 or 8 (from the station found near the "Tudor Vladimirescu" Student Campus, about 1.1 km from the TCM Department).

**To travel from "Tudor Vladimirescu" Student Campus to the Railway Station and in the opposite direction:** tram 7.

#### **Conference registration:**

Wednesday 13<sup>th</sup> September: 8.30-9.00, desk in the Main Hall of the Rectorat, Bdul Profesor Dimitrie Mangeron,

Thursday 14<sup>th</sup> September: 8.30-9.00, desk in the Main Hall of the Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill

**Information for Speakers:** the presentation should be brought in a memory stick. The organizers will ensure a laptop and a multimedia projector in each section room. Presentations will be loaded on the laptop during coffee / lunch breaks. In the case of presentations in conference sections, 15 minutes will be allocated for the proper presentation and 5 minutes to questions and discussion. In the case of plenary presentations (invited speakers), 40 minutes will be allocated for the presentation and 5 minutes will be allocated for the presentation and 5 minutes will be allocated for the presentation and 5 minutes will be allocated for the presentation and 5 minutes will be allocated for the presentation and 5 minutes will be allocated for the presentation and 5 minutes to questions and discussion.

**Banks:** banks are open from 9:00 - 17. ATMs are placed in the "Tudor Vladimirescu" Student Campus (1.1 km), Iulius Mall (1.1 km), Palace Mall (0.9 km)

**Pharmacy**: Iulius Mall (1.1 km), Palace Mall (0.9 km), "Tudor Vladimirescu" Student Campus (1.1 km from TCM Department)

#### Fire/ambulance and emergency phone number: 112

Electricity: 220 V

**Shopping**: Iulius Mall (1.1 km from the TCM Department building, Palace Mall (0.9 km from the TCM Department building), city center (about 2 km from the TCM Department building)

VAT: prices quoted are inclusive of value added tax

**Smoking**: is not allowed in the department building. The designed smoking areas are the zone of balcony and the zone outside of TCM Department building

#### Lunches:

13<sup>th</sup> and 15<sup>th</sup> September 2017: ensured by catering, TCM 4 room, Department TCM, 14<sup>th</sup> September 2017: Casa Pogor, Strada Vasile Pogor 4, Copou Hill



# September 13th (Wednesday)

Time	Activity	Venue
8.30-9.00h	Arrival and registration of participants /Secretariat	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
9.00-9.15h	Welcome and Opening Remarks	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
9.15-10.15h	1 <sup>st</sup> Tutorial Session Instructor: Prof. Christopher BROWN An Introduction to Axiomatic Design	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
10.15-10.30h	Coffee Break	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
10.30-11.30h	2 <sup>nd</sup> Tutorial Session Instructor: Prof. Joseph Timothy FOLEY Axiomatic Design for Everyone	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
11.30-11.45h	Coffee Break	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
11.45-12.45h	3 <sup>rd</sup> Tutorial Session Instructor: Prof. Miguel CAVIQUE Redundant Designs	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
12.45-14.00	Lunch	<b>TCM Department</b> , Bdul Profesor Dr. doc. Dimitrie Mangeron 59A
14.00-15.00	Poster Session	<b>TCM Department</b> , Bulevardul Profesor Dr. doc. Dimitrie Mangeron 59A
15.00-15.15	Opening Session and Welcome Speech	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
15.15-16.00	<b>Keynote:</b> Prof. Masayuki NAKAO Applying Axiomatic Design to Engineer's Job Search Defining DP of abduction skills for FR of new product development	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
16.15-19.30	Visit in Iași City Center	Bld. Carol: Palatul Culturii, Trei Ierarchi, Teatrul Național, Mitropolia
19.30-21.00	Welcome Dinner	Restaurant Panoramic, Str. Piața Unirii Nr. 5

# September 14<sup>th</sup> (Thursday)

Time	Activity	Venue
8.30-9.00h	Arrival of participants	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
9.00-9.45h	<b>Keynote:</b> Prof. Inas KHAYAL Assessing, Designing and Analyzing Healthcare Systems	<b>Gheorghe Asachi Technical University Hall,</b> Bld. Carol nr.11, Copou Hill
9.45-10.15h	Coffee Break	<b>Gheorghe Asachi Technical University Hall,</b> Bld. Carol nr.11, Copou Hill
10.15-11.15h	Paper Session 1 (3 papers)	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
11.30-13.00h	DHC Ceremony Keynote: Prof. Nam SUH, Teaching Students to Be More Creative Through Formal Pedagogy"	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
13.00-14.30	Lunch Break	Casa Pogor, Strada Vasile Pogor 4
14.30-15.15	Visit in the Old Library and Sala Pasilor Pierduti	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
15.15-15.30	Picture Time	
15.30-17.00h	Paper Session 2 (4 papers)	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
17.00-17.15h	Coffee Break	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
17.15-19.20h	Paper Session 3 (6 papers)	Gheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill
20.00h	Gala Dinner	Restaurant Chef Galerie- Urban Dinner, Str. Palat, nr. 3F, Palas Garden

# September 15<sup>th</sup> (Friday)

Time	Activity	Venue
9.00- 9.45h	International Committee Meeting	<b>Boardroom of TCM Department</b> , Bulevardul Profesor Dr. doc. Dimitrie Mangeron 59A, First floor
10.00-10.45h	<b>Keynote:</b> Prof. Christopher BROWN, Axiomatic Design of Athletic Equipment for Reducing Injuries without Limiting Performance - case studies in new product development	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
10.45-11.00h	Coffee Break	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
11.00-12.45	Paper Session 4 (5 papers)	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
13.00-14.00h	Lunch Break	<b>TCM Department</b> , Bdul Profesor Dr. doc. Dimitrie Mangeron 59A
14.00-14.45h	<b>Keynote:</b> Rajesh JUGULUM Use of Decomposition Principles in Data Management	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
14.45-15.00h	Coffee Break	Rectorate, Senate Hall, Bdul Profesor Dimitrie Mangeron 67
15.00-16.30h	Paper presentations 5 (6 papers)	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
16.30-16.45h	Closing Ceremony	<b>Rectorate, Senate Hall</b> , Bdul Profesor Dimitrie Mangeron 67
17.00-19.30	Visit of Cetățuia monastery	
20h	Farewell Dinner	Restaurant Centrul Vechi, Piața Lăpușneanu, 1

# September 16<sup>th</sup> (Saturday)

Visit of Iași surroundings, monasteries

### **KEYNOTES:**



Prof. Masayuki NAKAO, University of Tokyo, Japan "Applying Axiomatic Design to Engineer's Job Search Defining DP of abduction skills for FR of new product development"

Masayuki Nakao received bachelor and master degrees from the University of Tokyo in 1981 and 1983. He entered the Hitachi Metals Co. Ltd. as a researcher of magnetic recording, and worked HMT Technology Corp. its subsidiary company in California, as a production manager of hard disk from 1989 to 1992. In 1991, he took the doctor degree of the University of Tokyo on tribology between magnetic heal and disk. In 1992, he returned to the University of Tokyo as an associate professor, and has been a professor of Dept. of Engineering Synthesis from 2001 to the present. He is making researches on production technologies: precise/micro/nano manufacturing, instruments design for nano/bio/medical sciences and conventional technologies of molding, pressing, cutting and so on. Especially, He likes teaching and publishing on creative design and lessons from failure. He is a vice-chairperson of the NPO, Association for the Study of Failure.



Inas KHAYAL, Dartmouth College, USA "Assessing, Designing and Analyzing Healthcare Systems"

Dr. Inas Khayal is an Assistant Professor at the Dartmouth Institute of Health Policy & Clinical Practice at the Geisel School of Medicine and Adjunct Assistant Professor at the Department of Computer Science at Dartmouth College. She earned her PhD in Bioengineering from both the University of California, Berkeley and San Francisco. Dr. Khayal is a highly interdisciplinary translational researcher focused on improving chronic disease health outcomes. Her work began in biomedical research using technology within the clinic. It expanded to Internet-of-Things enabled social and environmental sensing outside the clinic and within 'real-world' living labs. She currently addresses the reality of the multi-level interconnected systems we live in. Her work acts at the intersection of engineering, medicine and innovation seeking to develop systems solutions that curb the growth of chronic disease. She was awarded as a 2017: Systems Science Scholar by AcademyHealth and Robert Wood Johnson Foundation New Connections Scholar.



Prof. Christopher A. BROWN, Worcester Polytechnic Institute, USA "Axiomatic Design of Athletic Equipment for Reducing Injuries without Limiting Performance - case studies in new product development"

In 1983 Brown earned his PhD at the University of Vermont where he learned about Axiomatic Design from Nam Suh. He then spent four years as a scientific collaborator in the Materials Department at the Swiss Federal Institute of Technology. For two years he was a senior research engineer designing product and processes at Atlas Copco's European research center.

Since the fall of 1989 Chris has been on the faculty at WPI. Chris has published over a hundred articles on axiomatic design, sports engineering, manufacturing processes, and surface metrology. He has patents on characterizing surface roughness, devices for friction testing, and on sports equipment for reducing injuries. He teaches grad courses on axiomatic design of manufacturing processes, and on surface metrology, and an undergraduate course on the technology of alpine skiing. He also consults, and teaches courses, for industry on axiomatic design and on surface metrology.



Rajesh JUGULUM, CIGNA, USA "Use of Decomposition Principles in Data Management"

Rajesh Jugulum, Ph.D., is the Director of global data strategies at Cigna. Prior to joining Cigna, he held executive positions in these areas at Citi Group and Bank of America. Rajesh completed his Ph.D. under the guidance of Dr. Genichi Taguchi. Before joining financial industry, Rajesh was with Massachusetts Institute of Technology, where he was involved in research and teaching. He taught Axiomatic design course with Prof. Nam Suh at MIT. Currently, he also teaches at Northeastern University, Boston. Rajesh is the author/co-author of several papers and four books including books on data quality and design for lean six sigma. He is also working on another book that focuses on combining data and process disciplines. Rajesh is an ASQ fellow and his other honors include American Society for Quality's Feigenbaum medal and International Technology Institute's Rockwell medal.

# Tutorial Session 1 - Wednesday 13 September 2017 9.15-10.15h

**Rectorate,** Gheorghe Asachi Technical University Senate Hall, Bdul Profesor Dimitrie Mangeron 67, Iași, România



Prof. Christopher A. Brown, PhD, FASME Director, Surface Metrology Laboratory Mechanical Engineering Department Worcester Polytechnic Institute 100 Institute Rd., 235 Washburn Bldg. Worcester, MA 01609-2280 Phone: 508 831-5627 cell: 508 560-6986 brown@wpi.edu https://www.wpi.edu/people/faculty/brown

## An Introduction to Axiomatic Design

The fundamental principles of Axiomatic Design (AD) and its application are reviewed. The main goals are to help attendees to begin using axiomatic design and perhaps better appreciate many aspects of the conference. Insights and perspectives of over 30 years of teaching and practice will be included.

Nam Suh at MIT started AD in the late 1970s. The underlying supposition is that all good designs comply with just two axioms: 1) they maintain the independence of the functional elements and 2) they minimize the information content.

AD can help with innovation, add value, and reduce cost in the design process and in the design solution, as well as in its use. In the tutorial emphasis will be placed on techniques for decomposing design problems so that the axioms can be applied systematically, with corresponding functional and physical domain hierarchies. The use of metrics will also be covered.

This tutorial is intended design engineers and engineering students, who might have never used AD, or who would like to see my perspective on using and teaching it for over 25 years.

Please read professor's Christopher Brown short biography in the keynote section.

# Tutorial Session 2 - Wednesday 13 September 2017 10.30-11.30h

**Rectorate,** Gheorghe Asachi Technical University Senate Hall, Bdul Profesor Dimitrie Mangeron 67, Iași, România



**Prof. Joseph Timothy Foley, PhD** School of Science and Engineering, Reykjavik University, Iceland Venus 3, +354-599-6569 foley@ru.is http://www.ru.is/starfsfolk/foley

## Axiomatic Design for Everyone!

Axiomatic Design~(AD) was originally conceived for and continues to focus on highly technical subjects, particularly the design of mechanical systems. Recent publications have explored deploying AD in new disciplines, implying its universality. This tutorial begins with examining the philosophy of AD to understand how it can be generalized for deployment in new fields. We continue our exploration of the worlds of creatives, hackers, and troublemakers to see what design issues they need addressed. Through their eyes, we gain a deeper understanding of how the core of Axiomatic Design can be applied by anyone!

Dr. Joseph Timothy Foley (MIT BSc '99, MEng, '99, PhD '07) has worked as a researcher and designer in a large variety of fields with a heavy emphasis on infrastructure and mechatronics. His graduate research at MIT focused on integrating RFID into smart devices in a scalable and secure way. He worked as a postgraduate researcher in the Environmentally Benign Manufacturing group at MIT in partnership with SKF, investigating methods of reducing the impact and energy usage of manufacturing processes. At iRobot's Government and Industrial division, he developed shape-changing robots as the technical lead for the Harvard-MIT-iRobot DARPA ChemBots team. This research resulted in a US patent on the manufacture of enhanced Shape Memory Alloy springs, a topic he still is researching.

He is now an assistant professor at Reykjavik University and teaches topics in mechatronics and mechanical design. He has integrated Axiomatic Design into the courses he currently teaches to provide students with a common framework for the heavily multidisciplinary nature of modern computer-controlled manufacturing and smart devices.

His research interests include aircraft maintenance automation, product design, embedded smart devices, wireless communication, physical security, and engineering-artist collaborations. His most recent developments in Axiomatic Design research include Creative Axiomatic Design (CIRP DC 2016), Desirable Complexity (ICAD 2017), and Axiomatic Design as an Ontology (CIRP DC 2017).

**Tutorial Session 3 -** Wednesday 13 September 2017 **11.45-12.45h** *Rectorate, Gheorghe Asachi Technical University Senate Hall, Bdul Profesor Dimitrie Mangeron 67, Iaşi, România* 



**Prof. Miguel Cavique, PhD** Sciences and Technology Department Escola Naval, Base Naval de Lisboa Alfeite, 2810-001 Almada, Portugal Phone: +351 210 902 094 cell: +351 964 025 006 cavique.santos@marinha.pt

## Redundant Design

Redundant designs belong to a special kind of designs, in which the number of design parameters is larger than the number of functional requirements. Such designs can also be uncoupled, decoupled or coupled, and this tutorial presents seven theorems that help identifying and generating good redundant designs. Different forms of redundancy are considered, specifically the functionality-related alternative and augmentative kinds.

Miguel Cavique is Professor at the Naval Academy in Naval Engineering, field of Mechanics. He received the diplomat Engineer from the IST (now part of the Lisbon University) in 1983, the Master from the IST in 1991 and the PhD from the New University of Lisbon in 2011. During his lifelong, he always maintained a parallel academic career and industrial jobs or activities. In the 80s, he worked at the gas network of Lisbon, a department of the Electricity of Portugal (EDP), running the department of network design. Thus, changed to IBM as system engineering where he gave support to bank customers on relational databases. In a similar period, was Assistant at the Faculty of Sciences of Lisbon and Auxiliary Professor at the Lusiada University until 1996 in the fields of Mathematics and Statistics. In the Polytechnic of Setubal (1991-2015), he dedicated his work to the areas of gas networks and air conditioning, making consultancy on air conditioning design and energy auditing of buildings. Moreover, he owned and industrial enterprise and further a commercial one on air conditioning systems, which maintains until now. Is specialist on air conditioning by the chartered association of engineers in Portugal, life member of the commission of the air conditioning specialization of the same association, and President (2016-17) of the Portugal Chapter of ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers). Prof. Miguel Cavique devoted the last ten years to the development and application of Axiomatic Design (AD), in particular in what concerns to the design of air conditioning systems, and most recently to the application of AD to the naval industry.

1. *Vlad Cazacu*: Application of Axiomatic Design Principles in the Case of a Device for Automated Testing of Phones and Tablets Touchscreen.

2. Madalina Popa: Deposition Technology of Thin and Hard Films on Cutting Tools

3. Marius Boca: Axiomatic Design used in Developing a CNC Micro Machine Tool

4. Marian Maniga, Costel Amariucai: Hydrogen Generator

5. Adriana Stratan, Ana Ciumeica: Equipment for Abrasive Jet Cutting

6. Sergiu Olaru, Alina Olaru: Approach of Die Conception by Axiomatic Design \

7. *Ionut Madalin Pista*: Axiomatic Design Process in Developing a Technological Device for Automated Assembly

8. Florina Cadar, Alexandru Enachi: Equipment for Roto-molding

9. *Bogdan Pralea*: Study of an Algorithm regarding Production Scheduling for Injection Mould Manufacturing"

10. Vasile Ermolai, Alexandru Pohonțu: Automated Naval Photo-Electricity Collector

11. Gheorghe Bosoancă: Device for Wire Electrical Discharge Machining

12. Cosmin Ionuț Iluc: Street Art

13. Mihaela Eţcu: Device for Studying the Effect of Singular Electrical Pulses

# Paper Session 1- Thursday 14 September 201710.15-11.15hGheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill

Session Chair: Professor Gabriele Arcidiacono

Joseph Foley, Arnór Freyr Símonarson, Hilmar Þór Símonarson, Lúðvík Friðrik Ægisson and Andri Þór Goethe	ADjustadesk An Adjustable Height Desk
Kenji Iino, Aitor Arruti and Masayuki Nakao	Axiomatic Design Aspect of a Braking System Redesign
João Fradinho, Miguel Cavique, António Gabriel- Santos, António Mourão and António Gonçalves- Coelho	How to Compute the Information Content of 3- FR, 3-DP Decoupled Designs with Uniform Probability Density Functions for their FRs

# Paper Session 2- Thursday 14 September 201715.30-17.00hGheorghe Asachi Technical University Hall, Bld. Carol nr.11, Copou Hill

Session Chair: Professor Erik Puik

Fernando Rolli, Chiara Parretti, Paolo Citti and Massimo Rinaldi	Functional Cases Test Design to Optimize the Software Development in Italian Tax Processes (Part I): Methodology Definition
Debbie Tarenskeen and Rene Bakker	Applying Axiomatic Design and Conceptual Independence in the Domain of IT Systems
Miguel Cavique, João Fradinho, António Gabriel- Santos, António Gonçalves-Coelho and António Mourão	The Iterative Nature of the "Zig" and How to Define the "Hows"
Joseph Timothy Foley, Guðmundur Þórir Sigurðsson, Jóhann Smári Gunnarsson, Jón Gautason and Ólafur Jósef Ólafsson	Mobile Motorcycle Lift for the Common Man

Session Chair: Professor Christopher Brown

Joseph Foley, Erik Puik and David S. Cochran	The Faucet Reloaded: Improving Axiomatic Design by Example
Chiara Parretti, Beniamino Pacifici, Andrea Girgenti and Paolo Citti	Axiomatic Design for an Efficient Development of Optimized RPM Systems
Petru Dusa, Eugen Purice, Gheorghe Nagit, Oana Dodun and Laurentiu Slatineanu	Construction of Patent Claims using Axiomatic Design
Markus Stäbler, Jakob Weber and Kristin Paetzold	Adapt!Evaluation - Evaluation for Design and Re-Design of Production Systems based on Axiomatic Design
Erik Puik, Joost Van Duijn and Darek Ceglarek	Guidelines for Application of the Constituent Roadmap of Product Design Based on Axiomatic Design
Gabriele Arcidiacono, Pierpaolo Placidoli, Stefano Nuzzi and Marco Molon	Improving Reliability of a Fire-Fighting Pump Set with Axiomatic Design

## Paper Session 4 - Friday 15 September 2017 11.00-12.45h

**Rectorate,** Gheorghe Asachi Technical University Senate Hall, Bdul Profesor Dimitrie Mangeron 67, Iaşi, România

Session Chair: Professor Masayuki Nakao

Joseph Foley, Vladimir Omelianov, Slawomir Koziel and Adrian Bekasiewicz	Low-cost Antenna Positioning System Designed with Axiomatic Design
Georg Egger, Erwin Rauch, Dominik Matt and Christopher A. Brown	(Re-)Design of a Demonstration Model for a flexible and decentralized Cyber-Physical Production System (CPPS)
Fernando Rolli, Chiara Parretti, Paolo Citti and Massimo Rinaldi	Functional Case Test Design to Optimize the Software Development in Italian Tax Processes (Part 2): F23 Tax Payment Form
Jakob Weber, David Förster, Markus Stäbler and Kristin Paetzold	Adapt! – Agile Project Management Supported by Axiomatic Design
Laurentiu Slatineanu, Oana Dodun, Margareta Coteata, Valeriu Dulgheru, Felicia Banciu, Irina Besliu and Petru Dusa	Selecting a Solution when using Axiomatic Design

## Paper Session 5 - Friday 15 September 2017 15.00-16.30h

**Rectorate,** Gheorghe Asachi Technical University Senate Hall, Bdul Profesor Dimitrie Mangeron 67, Iaşi, România

Leyla Sadeghi, Mahmoud Houshmand and Omid Fatahi Valilai	Applications of Axiomatic Design Theory in Design for Human Safety in Manufacturing Systems: A Literature Review
Oana Dodun, Ema Panaite, Petru Dușa, Gheorghe Nagîț and Laurențiu Slătineanu	Use of Axiomatic Design in Evaluation Two Devices for Positioning and Clamping the Workpiece in Ultrasonic Machining
Alireza Alipour and Mohammadali Shahi Ashtiany	An Axiomatic Design approach to Reduce Repetition in Conceptual Design Process of a product
Gheorghe Nagit, Laurentiu Slatineanu, Vasile Merticaru, Marius Ionut Ripanu, Andrei Marius Mihalache, Lucian Liviu Tabacaru and Mihai Boca	Analysis of a Device for Texturing by Burnishing using the Principles of Axiomatic Design method
Mahmoud Houshmand and Mehdi Amani	A Road Map for Knowledge Management Systems Design using Axiomatic Design Approach
Atena Gholami, Reza Sheikh and Neda Mizani	Customer ABC Analysis using Axiomatic Design and Rough-set Theory

Session Chair: Professor Miguel Cavique