Welcome to the 2014–2015 edition of the CIE division newsletter. I would like to first of all extend my sincere thanks to the technical committees, executive committee members, and volunteers for the dedicated services and contributions to the division. Thank you for taking the time to read our newsletter and we hope that, if you are not already a volunteer, you will consider becoming active in our division in the coming years. We had a successful conference this August in Buffalo and we have already started working towards the next one. In this newsletter you will find many of the activities and accomplishments of our division.

One of our main strategic goals going forward is to increase membership in our division. We have realized that many of you who have contributed to our division over the years may not have recently updated your division affiliation with ASME. So please take a moment to visit the ASME website, log into your account, and ensure that CIE is listed as your primary division. Of course, we would also like new ASME members to join our division and would like to actively recruit young engineers and students. As a CIE division member we would like to seek your help in promoting the division and recruiting new members. In addition to increasing our membership, we would like to encourage our current members to become more actively involved in our division’s activities. One way to do that is to join one of our technical committees and become involved in paper reviewing for our conference. At the next conference, please consider stopping by at one of our technical committee meetings. Please feel free to contact either the Executive Committee members or Technical Committee leaders for any suggestions you may have in helping us grow our division.

Our awards program has been very successful in highlighting the achievements of our members, but we need your help in identifying deserving colleagues. Ashok Kumar (akumar@ufl.edu<mailto:akumar@ufl.edu>) will serve as our Awards Chair this year. Please contact him with nominations and questions.
I would like to thank the CIE community for helping us have a very productive and successful conference. We had 143 papers accepted and presented in 30 sessions. The keynote address was given by Dr. Barry Smith with special lectures given by A. Katzenbach and K. Seventer. Four special panels were offered this year to bring a renewed focus within the division on industrial needs and capabilities. Effective July 1st, the new Executive Committee members are: Chair: Joshua Summers, Vice Chair: Krishnan Suresh, Program Chair: Monica Bordegoni, Secretary: Ian Grosse. Cameron Turner and Yan Wang will join the executive committee this year as the members-at-large. Marc Halpern, Vice President, Research, Manufacturing Advisory Services, Gartner Inc, will continue to be our Industry Executive. Our past chair, Ashok Kumar, is now the chair of the Honors and Awards Committee. 

More information about the division and its technical committees can be found at ASME.org, the newly launched social media website.

Honors and Awards

Our division’s honors and awards were awarded, as usual, during our annual conference, the 34rd CIE conference that took place August 17–20, 2014 in Buffalo, New York.

Dr. Herb Voelcker

Dr. Herb Voelcker, the Charles Lake Professor of Mechanical Engineering Emeritus at Cornell, received the CIE Lifetime Achievement award “in recognition of his outstanding achievements in the discipline of computers and information in engineering.” Professor Voelcker conducted pioneering research on solid modeling and machine tools and NC programming, among his many accomplishments.

Dr. Karthik Ramani

The CIE Excellence in Research Award was awarded to Dr. Karthik Ramani, the Donald W. Feddersen Professor of Mechanical Engineering Department, Purdue University “in recognition of his research excellence in the discipline of computers and information in engineering.”

The CIE Leadership Award was given to Prof. Alfred Katzenback, Owner of Katzenback Executive Consulting and Honorary Professor at the University of Stuttgart, “in recognition in the industry/government of his outstanding leadership in advancing the use of computers in engineering practice.”

The link to the CIE group is: https://community.asme.org/computers_information_engineering/default.aspx.

The 35th CIE conference will be held in Boston, MA, from August 2–5, 2015. We look forward to seeing you in Boston. Please visit the link below for more info: (https://www.asmeconferences.org/IDETC2015/)

Joshua D. Summers, Ph.D.
Professor of Mechanical Engineering
Clemson Engineering Design Applications and Research (CEDAR)
Clemson University
203 Fluor Daniel Building
Clemson, SC 29634–0921
This year the CIE Young Engineer Award went to Dr. Paul Witherell, a Mechanical Engineer in the Life Cycle Engineering Group of the Systems Integration Division of the Engineering Laboratory at the National Institute of Standards and Technology (NIST) “in recognition of his ability and potential for making significant contributions to the discipline of computers and information in engineering.”

Dr. Paul Witherell

The Distinguished Service Award was given to Dr. Ram D. Sriram, Chief of Software and Systems Division in Information Technology Laboratory at NIST “in recognition of distinguished and outstanding service for the Computers and Information in Engineering division of ASME.”

The Best of Conference Paper Award was awarded to Morad Behandish and Dr. Horea T. Ilies “Peg-In-Hole Revisited: A Generic Force Model for Haptic Assembly”.

This year announced awards for the best US dissertation and the best international dissertation. Dr. Beshoy Morkos, an assistant professor at the Florida Institute of Technology received the Best US Dissertation Award for his dissertation entitled “Computational Representation and Reasoning Support for Requirements Change Management in Complex System Design.” Dr. Niccolo’ Becattini, a research fellow at Politecnico di Milano, earned the Best International Dissertation Award for his dissertation entitled “Requirements Identification and Characterization in Innovation Processes.”

More information on these awards, and how to nominate candidates, can be found on the CIE Division web page under “Honors and Awards.”

Years in Perspective

Ashok V. Kumar

It was my great pleasure to serve as the Chair of the CIE conference last year. Serving in the executive committee for the past five years has been a very pleasant and rewarding experience for me, despite the work load and occasional frustrations, due to the friendship, support and tireless efforts of my colleagues in the committee. I know that the CIE division is in very able hands as I pass on the leadership role to Joshua Summers, Suresh Krishnan, Monica Bordegoni and Ian Grosse. This year we had the good fortune of recruiting two new members to the executive committee: Yan Wang and Cameron Turner. Both of them have been very active in our division in the past years in their respective technical committees and have shown great leadership abilities as well as commitment. So I believe the division is going to further improve, grow and prosper in the coming years. Now, as I take on the role of the past chair, I want to share with you my experiences, lessons learned and other observations from the last five years.

Before I joined the executive committee, I was involved in two different technical committees (TCs) in the CIE division, Computer Aided Product Design (CAPD) and Advanced Modeling and Simulation (AMS), and served as chair of both committees. At that time there were almost nine technical committees in CIE. These were consolidated into four and that was, in my opinion, a major change for the better. I joined the executive committee due to strong encouragement from John Michopoulos who was very instrumental in creating and strengthening the AMS TC. By consolidating the TCs, we now have four healthy and strong TCs that have had good participation and contribution over the past five years. It is very important, I feel, to create a reputation for the TCs as the natural home for a few key research
topics where researchers in the area feel that their work will get the needed recognition if they present a paper at our conference. I feel that such topics are emerging as we have started identifying special topics within each technical area. In the past several years, we have encouraged volunteers to sponsor these special topics within each TC and take on the entire responsibility for the topic including sending out call for papers, actively encouraging paper submission from researchers in the field and also carrying out the paper review coordination. Successful topics yield sufficient number of papers for one or more sessions at the conference and tend to emerge as the dominant research topics for the technical committee. The hope is that as more prominent researchers in a topic start actively participating and contributing papers, our conference will become the most sought venue for presenting papers on that topic. This process is very essential for creating a strong conference where participants can significantly benefit, learn and advance in the field. It gives a reason for older faculty to continue attending the conference and motivates younger generations to volunteer and participate. It is very important to maintain this virtuous cycle to keep the division and its conferences relevant and healthy.

Another change that has significantly benefitted our division has been the introduction of several new awards and efforts to actively nominate members for these awards. This effort, led by Ram Sriram, has also resulted in many new fellowship nominations from our division. Recently, we also introduced a best dissertation award to recognize outstanding students contributing to our division. Additionally, the CIE division has been sponsoring student poster sessions with travel support to encourage participation and to attract young researchers to our division. In addition to using custodial funds, we have received funding from NIST for invitational travel support to students who are U.S. citizens. We have also used our leadership award to recognize leaders in industry who have contributed to our field.

I would encourage young readers of our newsletter to seriously consider active involvement in our committees. The best way to start is to attend a technical committee meeting at the IDETC/CIE conference and volunteer to be a paper review coordinator. This will get you recognition and eventually opportunities at a leadership level in the technical committee. This is the best path to take if you want to eventually be nominated to the executive committee to lead the division. I want to thank all our members who have worked tirelessly in various technical committees to ensure that the conference run smoothly.

Last year, ASME launched a social media website (asme.org) and created groups for each division. The division websites have been replaced by these groups at asme.org. If you have not already done so, please visit asme.org and search for CIE. I would encourage all CIE division members to join the CIE group as a participant. Past newsletters, information about current leadership, technical committees and upcoming events are also available at this site.

Finally, I would like to thank all volunteers and the ASME staff for their help and support over the years. While changes are difficult to make quickly for a large organization like ASME I have certainly seen improvement over the years at a slow but steady pace. I would strongly encourage all of you to continue working hard to make CIE a strong division and make contributions by actively participating in all aspects of our division and the CIE conference.
Joshua D. Summers, Monica Bordegoni and Ashok V. Kumar

The 34rd CIE conference was held in Buffalo, NY, August 17–20, 2014. We received 178 papers for review, out of which 143 papers were accepted and organized into 30 parallel sessions. The conference provided an excellent platform for exchanging ideas. We truly appreciate the hard work of our technical committees, various topic and symposia organizers, and our referees.

CIE members were also involved in the organization of four panels. Monica Bordegoni organized a panel on “Low Cost VR Technology for Industrial Applications”, Daniela Faas organized a panel on “The Potential of Game-based Ecosystems for Innovation”, Marc Halpern organized a panel on “Industry Academia Collaboration,” and finally Janis Terpenny organized a panel on “Advanced Manufacturing: The Digital Manufacturing and Design Innovation (DMDI) Institute.”

The CIE keynote was held in a dedicated session on Tuesday. Dr. Barry Smith, the Julian Park Distinguished Professor of Philosophy at the University of Buffalo, was our keynote speaker with a talk entitled “Ontological Engineering”. Dr. Smith provided in his talk a historical perspective on how researchers from the disparate worlds of biomedicine and computer science came together and created arguably the most successful ontology to date— the Gene Ontology. Lessons learned and the future of ontologies as they apply to engineering endeavors were offered in a very entertaining talk.

The four technical committee meetings: Advanced Modeling and Simulation (AMS), Computer–Aided Product and Process Development (CAPPD), Systems Engineering, Information and Knowledge Management (SEIKM), Virtual Environments and Systems (VES) were held during the lunch break on Monday, as is the normal practice.

A CIE luncheon was organized on Tuesday, including award ceremony. Our awards ceremony recognized contributions to CIE in several categories: Excellence in Research, Young Engineer, Leadership, Distinguished Service, Best Paper awards and Best Thesis Dissertation awards. The various award winners and their citations are provided later in the newsletter.

Student Poster Awards were given for each technical committee. This year the award recipients consisted of 7 students from universities within USA and 1 student from European University. A full listing of the award recipients and their research poster titles is available in the Poster Session and Awards section of this Newsletter.

The 35th CIE conference will be held in in Boston, Massachusetts from August 2–5, 2015. We look forward to meeting you there.
Division Members Elected to Fellow Grade

This year there were two division members elected as Fellows—Dr. Herb Voelcker, a professor emeritus of the Sibley School of Mechanical and Aerospace Engineering at Cornell University and Dr. Kristina Shea, a professor of Engineering Design and Computing at ETH Zürich.

Technical Committee Reports

Advanced Modeling and Simulation (AM&S)

Yan Wang

As computation is now considered one of the three pillars for science advancement in addition to theory and experiment, modeling and simulation tools are extensively used by mechanical engineers in design. The goal of Advanced Modeling & Simulation (AMS) is to promote the use of advanced modeling and simulation in solution of engineering problems and to encourage the development of new algorithms and methods that lead to faster and more accurate simulation tools. This year 56 papers were accepted among the eight symposiums in AMS. The presented topics ranged from new numerical methods for solving differential equations to applied engineering analysis with commercial modeling software. Two new topics were added this year: Design and Simulation for Additive Manufacturing (jointly organized with SEIKM) and Modeling & Simulation of Humans in Engineering. The AMS symposium topics presented at the Buffalo conference are listed as follows.

1. **AMS General**: A broad range of topics on modeling and simulation, especially those not included in the special sessions below.
2. **Inverse Problems in Science and Engineering**: Papers focused on the solution to inverse problems including shape design, material properties determination, boundary values/initial value identification, force and source determination, and governing equation determination were presented.
3. **High Performance Computing**: This topic incorporates the development and applications of Graphics Processing Unit (GPU) computing and has been expanded to include other areas of high performance computing including heterogeneous GPU/CPU computing and cloud computing. The organizers hosted contributions that demonstrated high performance computing in various fields including CAD, CAE, CAM, CFD, and life sciences.
4. **Computational Multiphysics Applications**: The models and numerical methods to capture the interactions among different physical phenomena in real-life systems, as well as phenomena with multiple length and time scales were the topics of this symposium.

5. **Uncertainty Quantification in Simulation and Model Verification & Validation**: Uncertainties are inherent in computational models because of abstraction and numerical treatments. In this symposium, methods for rigorous quantification of uncertainties in simulation and their applications in manufacturing, reliability assessment, and battery design were presented.

6. **Design and Simulation for Additive Manufacturing**: Simulation plays an important role to understand the detailed processes of additive manufacturing. In this symposium, papers on various aspects of additive manufacturing including computational geometry, microstructural design, process control, multiphysics simulation were presented.

7. **Simulation in Manufacturing**: Simulation tools are useful to understand manufacturing processes and predict outcomes. In this symposium, simulation methods were demonstrated in various manufacturing processes, such as machining, laser hardening, and casting.

8. **Modeling and Simulation of Humans in Engineering**: Most engineered products have human interaction at some point in their life cycles. The aspects of human safety, comfort, ergonomic and cognitive issues, as well as user interaction with the product, service, and environment in general were the discussed topics in this symposium.

AMS GPU Workshop
This workshop provided an overview of CUDA-enabled GPU computing, followed by a hands-on GPU programming session. The participants had the opportunity to use their laptops to remotely log into a GPU cluster and understand through concrete hands-on examples some of the concepts covered in the first part of the workshop. The workshop concluded with a discussion of library support for GPU computing.

AMS Paper Award:

2014 AMS TC Leadership
**Chair**: Yan Wang, Georgia Institute of Technology, yan.wang@me.gatech.edu  
**Co-Chair**: Brian Dennis, University of Texas, Arlington, dennisb@uta.edu  
**Vice Chair**: Mahesh Mani, University of Maryland, mmmani@umd.edu  
**Secretary**: Seung Ki Moon, Nanyang Technological University, skmoon@ntu.edu.sg

Computer-aided Product and Process Development (CAPPD)

Gaurav Ameta

At the 2014 CIE conference, CAPPD sponsored six conference tracks with a total of 39 papers. The tracks included sessions on a) CAPPD general, b) Multimodal INTerfaces for Engineering Design (special session organized by Rahul Rai since 2013), c) Digital Human Modeling for Engineering Application (special session organized by Caterina Rizzi and Giorgio Colombo since 2013), d) Emotional Engineering (special session organized by Shuichi Fukuda since 2009), and e) Modeling Tools and Metrics for Sustainable Manufacturing (special session organized by Gaurav Ameta and Mahesh Mani since 2009).

Best paper award: Every year, the CAPPD technical committee selects one paper for the Prakash Krishnaswami best paper award based on novelty, completeness, relevance, potential impact, clarity and presentation. This year’s Prakash Krishnaswami CAPPD Best Paper Award was given to Xiaoping Qian, Kang Li, Caitlin Martin and Wei Sun from University of Wisconsin

2014 CAPPD TC Leadership

Chair: Gaurav Ameta, Washington State University (gameta@wsu.edu)
Vice-Chair: Caterina Rizzi, Universita’ di Bergamo (caterina.rizzi@unibg.it)
Secretary: Rahul Rai, University of Buffalo (rahulrai@buffalo.edu)

Virtual Environments & Systems (VES)
Daniela Faas

The Virtual Environment & Systems (VES) technical session hosted 22 presentations organized in the five sessions which addressed topics such as fundamentals of augmented reality & virtual reality, architecture & systems, interaction techniques, haptics, and gaming. Researchers from eight different countries participated in VES, including England, Germany, Italy, Japan, Mexico, Romania, The Netherlands, and the United States.

The VES community showed interest towards the use of virtual and augmented reality technologies applicable to industrial domains such as aerospace, automotive, manufacturing. Growing interest was also noticed towards low-cost devices and their feasibility for professional use cases as well as games in engineering. Due to the increasing interest in games, the session topic ‘gaming’ was included to the roster for the first time this year. Gaming addresses topics such as cyber-physical game systems, serious game in engineering, mixed reality games for engineering, in general, research that explores the area of games in engineering design and manufacturing. The session hosted five presentations with interesting questions, discussions, and new ideas. Due to the great acceptance, VES will maintain this topic in future. Also for the first time, VES proposed and hosted a panel session on the topic ‘The Potential of Game-based Ecosystems for Innovation.’ This panel session discussed and envisioned the future of game-based approaches in the engineering areas design, product development, production, and management.

In addition to this, VES organized an interactive panel of low-cost VR technology for the second time. The panel focused on industrial applications of low-cost, off-the-shelf equipment. Four initial talks summarized recent developments in this area, which encouraged the attendees to contribute to the discussion, and to presume future prospective trends.

The paper entitled “Peg-in-Hole Revisited: A Generic Force Model for Haptic Assembly” written by Morad Behandish and Horea Ilies (both University Of Connecticut) was honored with the best paper award.

2014 VES TC Leadership

Chairs: Daniela Faas, Harvard University (dfaas@seas.harvard.edu)
Co-Chair: Rafael Radkowski, Iowa State Univ. (rafael@iastate.edu)
Secretary: Francesco Ferrise, Politecnico di Milano (francesco.ferrise@polimi.it)
An observation of fast-rising interests shown in the Systems Engineering, Information, and Knowledge Management (SEIKM) activities is related to design and engineering problems centered on their complexity, large size, uncertainty and the big data simultaneously generated. To help the community and industrial folks coping with such challenges, several efforts have been advanced at SEIKM TC.

Since 2009, Design Informatics (DI) has emerged as a special session, then a special symposium, and starting from the 2012 CIE conference in Chicago, IL it is elevated as a permanent topic under SEIKM TC. DI is particularly interested in how design information and knowledge are being generated, represented, perceived, interacted – stored, searched and retrieved, and reused from conceptual design to the end of product lifecycle. It has its very own nature of multidisciplinary study and harnessed the latest advancements in machine learning, data/text/multimedia mining, information retrieval, semantic technology, ontology engineering and so on. Several crucial aspects that DI emphasizes include data analytics, handling of big data, information retrieval and knowledge management, semantic-based applications and so on in design and engineering.

Meanwhile, the advances in the Complex and Large Scale Engineering Systems have successfully maintained its momentum in attracting significant interests in the community.

In the 2014 conference, SEIKM wanted to focus on smart manufacturing. Smart Manufacturing has the potential to fundamentally change how products are designed, manufactured, supplied, used, remanufactured and eventually retired. In the context of manufacturing, “smart” systems are adaptive systems with differing levels of autonomy. Built upon advanced cyber physical systems and data analytics, smart manufacturing system will enable rapid realization of products, dynamic response to changing demand, and real-time performance optimization of production and supply chain networks. Our focus is a smart manufacturing system (SMS) that aims at integrating these at the enterprise level, enabling real-time control and data sharing throughout the extended enterprise.

SEIKM TC introduced a symposium on CIE-24 SEIKM: Predictive Analytics for Smart Manufacturing. But this symposium did not get enough papers. This may be due to other conferences specifically addressing Big Data Analytics for Manufacturing. Maybe in 2015 we can try this again to address the specific research issues of bringing manufacturing science and data science a bit closer.

In cognition of significant research progress achieved, the 2014 SEIKM Best Paper Award was given to two papers: DETC2014-34940, An Empirical Study Of Information Exchange And Design Support In Product Family Development, Michael Lundin, Erik Lejon, Andreas Dagman, Mats Näström, and Peter Jeppsson and DETC2014-3546, An improved L1 based algorithm for standardized planar datum establishment, Craig M Shakarji, Vijay, Srinivasan.

SEIKM contributors hosted several workshops in 2012, and 2013 and this trend continued 2014 in Buffalo, NY.

SEIKM TC will work closely with other TCs to identify and select those promising research efforts, which are led by postgraduate students and are still at their early stages to be reviewed and appreciated by the SEIKM, and CIE community at large.

2014 SEIKM TC Leadership
Chair: Sudarsan Rachuri, National Institute of Standards and Technology, USA (sudarsan@nist.gov)
Vice Chair: Farhad Ameri, Texas State University, (ameri@txstate.edu)
Secretary: Chris Hoyle, Oregon State University (chris.hoyle@oregonstate.edu)
Past Chair/Award Chair: Richard Malak, Texas A&M University (rmalak@tamu.edu)
Poster Session and Awards

Rahul Rai

This year the ASME CIE Division organized a poster session for graduate students to present their current research at the annual conference. The poster session aimed at targeting graduate students early in their research program (within 1 year of starting a MS or 2 years of starting a PhD). The students had a chance to get external feedback on their preliminary research from the ASME scientific community. It was required that the research directly addressed computers and information in engineering topics, either through the development of new development, application and evaluation of software, or empirical studies of engineering software.

The CIE Executive Committee supported this initiative, which was promoted by all the TC-Technical Committees (AMS, CAPPD, SEIKM and VES).

We received 16 abstracts from 11 Schools: 15 were from USA Universities, and 1 from European and Asian Universities.

Eight stipends of $750 each, two for AMS, SKEIKM, VES TC and three for CAPPD TC, have been assigned. Seven Award winners were from USA Universities, and one awardee was from European and Asian Universities. All of them were PhD students. In the following it is reported the list of the Award winners, subdivided by TC:

AMS

CAPPD
- ZHU Zhifu, Missouri University of Science and Technology– Advanced Modeling and Computational Algorithm for MDO Under Time Dependent Uncertainties.

SEIKM
- BELLO Oladapo, University of Arkansas, Reliability Modeling For Safety in Complex Systems
- BHANDARI Siddarth, Purdue University, Secure Collaboration in Engineering Systems Design

VES
- RUIZ Isabel Ramirez, Politecnico de Milano, Automotive Preview Model

The poster session and Award Ceremony have been held on Tuesday, August 19th at 5:00pm. The 8 students exhibited their posters and presented their on-going research to the ASME Community.
News from CIE Executive Committee

Joshua Summers

After the TC annual meetings held at Buffalo, NY, the following 2014–2015 leadership team was elected.

**AM&S TC Leadership**
Chair: Mahesh Mani, NIST (mahesh@nist.gov)
Vice-Chair: Seung Ki Moon, Nanyang Technological University (skmoon@ntu.edu.sg)
Secretary: Krishnanand Kaipa, University of Maryland (kkrishna@umd.edu)
Past-Chair: Yan Wang, Georgia Institute of Technology (yan.wang@me.gatech.edu)

**CAPPD TC Leadership**
Chair: Caterina Rizzi, Università di Bergamo (caterina.rizzi@unibg.it)
Co-Chair: Rahul Rai, University of Buffalo (rahulrai@buffalo.edu)
Secretary: Chi Zhou, University of Buffalo (chizhou@buffalo.edu)
Past-Chair: Gaurav Ameta, Washington State University (gameta@wsu.edu)

**VES TC Leadership**
Chair: Rafael Radkowski, Iowa State Univ. (rafael@iastate.edu)
Co-Chair: Francesco Ferrise, Politecnico di Milano (francesco.ferrise@polimi.it)
Secretary: Robert E. Wendrich, University of Twente (info@rawshaping.com)
Past Chair: Chair: Daniela Faas, Harvard University (dfaas@seas.harvard.edu)

**SEIKM TC Leadership**
Chair: Farhad Ameri, Texas State University (ameri@txstate.edu)
Vice-chair/Program Chair: Chris Hoyle, Oregon State University (chris.hoyle@oregonstate.edu)
Secretary: Ashis Banerjee, General Electric (ashis.banerjee@gmail.com)
Past Chair/Award Chair: Sudarsan Rachuri, NIST (sudarsan@nist.gov)

**ASME blog on Academic–Industry Alignment**
Marc Halpern, Vice President, Research, Manufacturing Advisory Services, Gartner Inc, has set up a group called "Aligning Academic Research with Industry Needs" on the ASME social media website. We invite all the CIE Members to visit and discuss challenging topics proposed in the blog: https://community.asme.org/aligning_academic_research_with_industry_needs/f/6412/t/976.aspx
First Volume of the *Advances in Computers and Information in Engineering Research (ACIER)* Book Series is in Production

John Michopoulos, David Rosen, Chris Paredis, Judy Vance, Book Series Editorial Board

The first volume of the *Advances of Computers and Information in Engineering Research (ACIER)* book series, which is sponsored by CIE and ASME, is in production. Since the ACIER book series reflects the CIE division’s second most important outreach project after the annual conference, and as it is in the inaugural stage, we are taking this opportunity in the newsletter to update the members of the division on its current status.

The Editorial Board is happy to inform you that the editorial process has been completed along with the graphic design of the front, side, and back covers of the volume. As a result, the first complete volume of the series was sent for pre-production on the first week of August 2014. Through the expedient action of the ASME publications staff, the resulted pre-production copy was available for review by the editorial board and some of the authors who were present at the IDETC/CIE conference at Buffalo NY. The review process identified several issues which were subsequently fixed. The lessons the Board learned during their experiences from the production of the first volume will improve the process of generating the follow up volumes in this series.

The final content and cover design were produced and sent to the production firm on the last week of October 2014 for final production. Thus, we are happy to inform the CIE community that the first production run is expected to be completed in the second week of November 2014. The designated author from the co-authoring team of each chapter will be receiving a single copy of the volume at the shipping address they have provided at no cost within the month of November 2014.

The hard copy of the volume is available for ordering at https://www.asme.org/products/books/advances-computers-information-engineering at the price of $159.00 for the general public and at the price of $127.00 (20% discount) for ASME members. ASME has agreed that additional co-authors of book chapters can order the book at a 40% discount from the price for general public, upon request.

Most importantly, all CIE members will have free of charge access to the electronic version of the volume (when available) from the ASME Digital Collection site at http://asmedigitalcollection.asme.org/ under the subheading “eBooks”. A separate announcement will be created when this milestone is achieved.

We believe that this first volume had achieved its goals of being produced with our highest criteria of excellence in terms of both form and content. We also feel that we have achieved our ultimate initial goal for completing the beginning of a hopefully long lasting series that will document CIE’s contributions to the field and stimulate more to come. It is our hope that this inaugural volume will stimulate a more intense participation from CIE members in the future starting with the second volume. The chapter solicitation for the follow up volume will appear in a future newsletter like the present one and at the series web-site at http://cie-advances.asme.org/ when appropriate.
Relevant Journals, Conferences & Workshops

The Journal of Computing and Information Science in Engineering publishes archival research results and advanced technical applications. The scope includes: Solid and Geometric Modeling; Computational geometry; Reverse Engineering; Virtual Environments and Haptics; Tolerance Modeling and Computational Metrology; Rapid Prototyping; Internet-Aided Design, Manufacturing and Commerce; Information Models and Ontologies for Engineering Applications; PDM/Enterprise Information Management; AI/Knowledge Intensive CAD/CAM; Engineering Simulation and Visualization, including FEA and Meshing; Creative IT; and Computational Algorithms/Software Development for mechanical product development.

http://computingengineering.asmedigitalcollection.asme.org/journal.aspx

ASME 2015 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference (IDETC/CIE 2015) will take place during August 2-5, 2015 in Boston, Massachusetts. This year IDETC/CIE 2015 will also collocate with the ASME 2015 Additive Manufacturing + 3D Printing.

Founded in 1880 as the American Society of Mechanical Engineers, ASME is the premier professional membership organization for more than 127,000 mechanical engineers and associated members worldwide. ASME also conducts one of the world’s largest technical publishing operations in the world, offering thousands of titles including some of the profession’s most prestigious journals, conference proceedings, and ASME Press books.

The ASME Digital Collection, previously known as The ASME Digital Library, is ASME’s repository of current and archival literature featuring:

- ASME’s Transaction Journals from 1960 to present.
- ASME’s Conference Proceedings from 2002 to present.
- ASME Press eBooks selected from 1993 to present.

http://asmedigitalcollection.asme.org/index.aspx
CIE NEWSLETTER EDITORIAL

Issue Editors
Dr. Ian Grosse, University of Massachusetts
grosse@ecs.umass.edu
Dr. Mahesh Mani, NIST
mahesh@nist.gov

Contributions
Dr. Joshua Summers, Clemson University
Dr. Ashok V. Kumar, University of Florida
Dr. Yan Wang, Georgia Institute of Technology
Dr. Gaurav Ameta, Washington State University
Dr. Daniela Faas, Harvard University
Dr. Sudarsan Rachuri, NIST

https://community.asme.org/computers_information_engineering/default.aspx
Photos from the 2014 Conference

2014 CIE Luncheon

CIE Chair Dr. Joshua Summers Welcome Address

CIE Leadership Award to Prof. Alfred Katzenback

CIE Excellence in Research Award to Dr. Karthik Ramani

CIE Lifetime Achievement Award to Dr. Herb Voelcker
(Supported by Cyient Limited)

CIE Young Engineer Award to Dr. Paul Witherell
Distinguished Service Award to Dr. Ram Sriram

ASME Fellow Dr. Kristina Shea

2014 Best Ph.D. Dissertation Award to Dr. Beshoy Morkos

Best Ph.D. Dissertation Award to Dr. Niccolo' Becattini
(Award received in absentia)

2014 CIE Best Paper Award: M. Behandish and H. Illies

ASME CAPPD 2014 Prakash Krishnaswami Best Paper Award: K. Li, X. Qian, C. Martin, W. Sun

2014 Robert E. Fulton SEIKM Best Paper Award: C. M. Shakarji and V. Srinivasan

2014 Robert E. Fulton SEIKM Best Paper Award: L. Li, F. W. Qin, and S. Gao, X. Qin (Award received in absentia)


Special lectures given by Professor A. Katzenbach and Dr. K. Seventer

Advanced Manufacturing Panel: Simon Frechette, Gail Hahn, Dr. Judy Vance, Dr. Tolga Kurtoglu, Dr. Dean Robinson, Dr. Dean Bartles, Dr. Janis Terpenny
Panel on Industry–Academy Collaboration: Dr. Vijay Srinivasan, Dr. Yan Fu, Diego Tamburini, Dr. Janis Terpenny

CIE ExCom: Dr. Yan Wang, Dr. Krishnan Suresh, Dr. Ashok Kumar, Dr. Joshua Summers, Dr. Monica Bordegoni, Dr. Cameron Turner, Dr. Marc Halpern, Dr. Ian Grosse

The ASME Referral Drive • Everybody Wins!
Help grow membership while supporting ASME’s important work around the globe - plus earn great prizes in the process! Learn more and view the entire selection of exciting reward options.

https://www.asme.org/professional-membership