

**ABSTRACT PROCEEDING**

**Volume 1, Issue 2**



**MRCM-JULY-2019**

**Venue: Rome, Italy**

**Date: July 25-26, 2019**



**Association of  
Engineering Technology  
& Applied Sciences**

# **AETA International Conference on Multidisciplinary Research Trends in Technology Communication, Engineering, Applied Sciences & Metals Sciences (MRCM)**

Conference organized by:



Association of Engineering Technology & Applied Sciences (AETA) aims to provide a forum for researchers, practitioners, and professionals from the industry, academia and government to discourse on research and development, professional practice in engineering technology and applied sciences..

#### **Mission, Innovative Features & Ethics and Values**

AETA is an organization aims to provide a platform to innovative academicians and researchers around the globe. The organization also encourages research activities by organizing research training workshops, conferences and publishing high quality research manuscripts in reputable international journals.

AETA is a dedicated platform to promote and encourage the latest advancements in Science, Engineering Technology & Applied Sciences for the betterment of human development.

We are passionate about discovering new ways to create value for our members and society. Driven by intellectual curiosity, we promote a culture of invention among all our delegates.

#### **Membership, Conference, Publishing, and Research Information**

Abstracts of the registered participants will be published in the conference abstract book with an ISBN.

mail: [info@association-eta.com](mailto:info@association-eta.com)

Web site: <https://association-eta.com/>

**AETA International Conference on Multidisciplinary Research Trends in Technology Communication, Engineering, Applied Sciences & Metals Sciences (MRCM)**

**Table of content**

Welcome Message . . . . .	5
Scientific Committee . . . . .	6
Engineering & Technology Studies . . . . .	7
Conference Schedule . . . . .	9
Conference Abstracts . . . . .	12
The Need for an Overarching Macroeconomic Theory During Credit Expansion . . . . .	13
Global Logistics Management and IT-Based Business Process Reengineering . . . . .	14
The Social Model of the Korean Welfare State . . . . .	15
Critical Pragmatic Organizational Cognition: The Case for an Embodied Perspective . . . . .	16
Conference Abstracts . . . . .	17
Thermal Examinaton of the Healng Process after Carpal Tunnel Syndrome Operaton . . . . .	18
Upcoming Events . . . . .	19

## **Welcome Message**

AETA International Conference on Multidisciplinary Research Trends in Technology Communication, Engineering, Applied Sciences & Metals Sciences (MRCM)

We are happy you decided to join your colleagues from around the world to explore innovative technologies, pioneering pedagogical strategies, and a sampling of international collaborations that are being used to engage and retain students, researchers and Scholars in the new millennium.

## Scientific Committee

Prof. Kaninda Musumbu, LaBRI , Universite Bordeaux 1, France

Prof. Figueira, F. M. Monteiro, ULHT - Universidade Lusofona, Portugal

Dr. Ahmad Fairuz Bin Omar, School of Physics, University Science Malaysia, Malaysia

Dr. Le Hoang Son, Hanoi University of Science, Viet Nam National University, Vietnam

Dr. Emil Pricop, Petroleum-Gas University of Ploiesti, Romania

Prof. Viacheslav Pshikhov, Southern Federal University, Russian

Prof. Chomtip Pornpanomchai, Faculty of Information and Communication Technology, Mahidol University, Thailand

Prof. Anjaiah Devineni, Manipal University, India

Prof. Dong-Chul Park, Myong Ji University, Korea Prof. Mohamed Ben Haj Frej, POST University, USA

Abdulrhman.A.A.Emhemed, Assistant Professor, College of Technical Sciences-Bani walid, Libya

## Acknowledgements

The organizing committee would like to thank all those people who were involved in making the conference a success. A great amount of planning and organizing is required to hold a successful conference, so we are indebted to those who volunteered their time and energy.

We want to thank all the members of the Association of Engineering Technology & Applied Sciences who volunteered their time to help organize the conference.

## Engineering & Technology Studies

Acoustical engineering Agricultural engineering Aquacultural engineering Aquatic and environmental engineering Architectural engineering Army engineering maintenance Atomic engineering Aviation engineering B Biological interface engineering Biomechanical engineering Bioresource engineering Broadcast engineering Building services engineering C Ceramic engineering Chemical engineering Civil engineering Civionics Climate engineering Cloud engineering Collaborative engineering Computer engineering Computer-aided engineering Computer-aided production engineering Construction engineering Control engineering Cost engineering D Detailed engineering E Earthquake engineering Ecological engineering Electrical engineering Electronic engineering.

## Accounting

Accounting Practices, Financial Modeling, Financial Analysis, Financial Statistics, Future Markets, Risk, New Trends for Accounting and Finance, Research for Accounting, Tax Theories and Practices, Tax Avoidance, Invasion and Extraction from Tax Invasion, Corporate Finance, Finance Theories, Money, Credit and Banking, Stock, Currency and Bonds, Commodity

## Computational Engineering

Computational science and engineering (CSE) is a relatively new discipline that deals with the development and application of computational models and simulations, often coupled with high-performance computing, to solve complex physical problems arising in engineering analysis and design (computational engineering) as well as natural phenomena (computational science). CSE has been described as the "third mode of discovery" (next to theory and experimentation).[1] In many fields, computer simulation is integral and therefore essential to business and research. Computer simulation provides the capability to enter fields that are either inaccessible to traditional experimentation or where carrying out traditional empirical inquiries is prohibitively expensive. CSE should neither be confused with pure computer science, nor with computer engineering, although a wide domain in the former is used in CSE (e.g., certain algorithms, data structures, parallel programming, high performance computing) and some problems in the latter can be modeled and solved with CSE methods (as an application area).A Agent-based computational economics Algorithmic art Artificial intelligence Astrominformatics Author profiling B Biodiversity informatics Biological computation C Cellular automaton Chaos theory Cheminformatics Code stylometry Community informatics Computable topology Computational aeroacoustics Computational archaeology Computational astrophysics Computational auditory scene analysis Computational biology Computational chemistry Computational cognition Computational complexity theory Computational creativity Computational criminology Computational economics Computational electromagnetics Computational epigenetics Computational epistemology

## Interdisciplinary

Children and Youth, Communications and Media, Complex Systems, Conflict resolution, Creativity, Culture, Disaster Management, Discourse, Film studies, Gender studies, Globalization, HIV/AIDS, Human Rights, Identity, LGBT Studies, Leadership, Memory, Multidisciplinary Studies, Poverty, Public Policy, Security, Sexuality and eroticism, Spirituality, Sport science, Sustainable development, Urban studies, Violence Women's studies

## General Economics, Economic Development, Technological Change and Growth

Microeconomics, Household Behavior and Family Economics, Economic Development , Sustainable Development, Eco-Development, Production and Organizations, Welfare Economics, Macroeconomics and Monetary Economics, International Economics, Public Economics, Analyses of Economic Development, Agriculture; Natural Resources; Energy; Environment; Other Primary Products, Human Resources; Human Development; Income Distribution; Migration, Economic Development: Financial Markets; Savings and Capital Investment; Corporate Finance and Governance, Regional, Urban, and Rural Analyses, International Linkages to Development; Role of International Organizations, Fiscal and Monetary Policy in Development, Trade Policy; Factor Movement Policy; Foreign Exchange, Innovation and Invention: Processes and Incentives, Management of Technological Innovation and Research and Development

## **IT Business**

Business for AI and Deep Learning, Technological Forecasting and Social Change, Business for Big Data, Internet of Things and Cloud Computing, Business for IT-driven Services, Information Systems and Informatics, ICT for Business, ICT for Education, Healthcare, Finance and Other Sectors, Large Scale Surveys and Analysis, HCI and Computers Human Behavior, Computers In Industry



## Conference Schedule

### **AETA International Conference on Multidisciplinary Research Trends in Technology Communication, Engineering, Applied Sciences & Metals Sciences (MRCM)**

Rome, Italy

July 25-26, 2019

09: 00 am - 09: 30 am	Registration and Reception
09: 30 am - 09:40 am	Introduction of Participants
09: 40 am - 09:50 am	Inauguration and Opening address
10: 50 am - 10:00 am	Grand Networking Session
10: 00 am - 10:30 am	Tea Break

## **AETA International Conference on Multidisciplinary Research Trends in Technology Communication, Engineering, Applied Sciences & Metals Sciences (MRCM)**

**Day 01: Thursday  
July 25, 2019**

**Session 01: 10:30 am - 11:40 am**

**Track A: Business Management, Economics, Social Sciences & Humanities**

---

Presenter Name: Gabriel A. Gimenez Roche

Reference ID: CBSSG-JULY-02

Paper Title: The Need for an Overarching Macroeconomic Theory during Credit Expansion

---

Presenter Name: Lee, Chao Hsiung

Reference ID: CBSSG-JULY-03

Paper Title: Global Logistics Management and IT-Based Business Process Reengineering

---

Presenter Name: Seung Jae Oh

Reference ID: CBSSG-JULY-13

Paper Title: The Social Model of the Korean Welfare State

---

Presenter Name: W. David Holford

Reference ID: CBSSG-JULY-14

Paper Title: Critical Pragmatic Organizational Cognition: The Case for an Embodied Perspective

---

**Session 02: 11: 40 am - 12:00 pm**

**Track B: Engineering Technology & Applied Sciences**

---

Presenter Name: Yavuz Selm Taspnar

Reference ID: MRCM-07-P2

Paper Title: Thermal Examination of the Healing Process after Carpal Tunnel Syndrome Operation

---

**Closing Ceremony & Lunch (12:00 pm - 01:00 pm)**

---

# **AETA International Conference on Multidisciplinary Research Trends in Technology Communication, Engineering, Applied Sci- ences & Metals Sciences (MRCM)**

**Day 02: Friday  
July 26, 2019**

**Conference second day is reserved for participants own tourism activities.**

## **Conference Abstracts**

**Track A: Business, Economics, Social Sciences and Humanities**

# The Need for an Overarching Macroeconomic Theory During Credit Expansion

Gabriel A. Gimenez Roche \*

Finance Department, NEOMA Business School, France

**Corresponding email:** gabriel.gimenez-roche@neoma-bs.fr

---

After the 2008 financial crisis, it became obvious that the correlation parameters in the models used by credit rating agencies to assess ABS and CDO risk were seriously misestimated during the period before the crisis. This over-optimism was partly based on a lack of historical data to robustly support correlation estimates in risk-evaluation models. But the models also lacked the guidance of an overarching macroeconomic theoretical framework to place them in a context of central bank-induced bank credit expansion. This paper argues that had such a theoretical framework been adopted, though it would still have been impossible to predict the onset of the default wave objectively, it would have been possible to anticipate a wave of high correlations for credit-induced boom assets, as these are ultimately linked by monetary expansion. A full understanding of these effects would necessarily lead to more realistic, conservative asset correlation estimates.

**Index Terms:** Asset Correlation, Business Cycle, Credit Expansion, Financial Crisis, Malinvestment, Structured Finance

# Global Logistics Management and IT-Based Business Process Reengineering

Lee, Chao Hsiung \*

National Chung Hsing University, Taiwan

**Corresponding email:** chlee@nchu.edu.tw

---

Due to the rapid network communication, developed transportation, and convenient financial circulation, the structure of the industry changed substantially. Enterprises begin to cogitate overall supply chain and customer relationship as a global view, and the operation of enterprises becomes more competitive by engaging process reengineering and integrating the approach of global logistics management (GLM). In terms of global logistics management, the study investigated how global logistics management affected by information technology (IT) and business process reengineering (BPR), analyzed the relationship between GLM, BPR, and IT, and how it affected business performance directly and indirectly. The economic environment in Taiwan has advantages to develop global logistic. 800 firms listed in Taiwan Stock Exchange were mailed to respond the questionnaire. 113 valid questionnaires were used for the relative research. By applying multi-regression and covariance structure model analysis, the study finds that using IT as an infrastructure of BPR to reengineer business processes, is significantly positive to the operation of GLM. Additionally, enterprises move forward to the globalization by impelling GLM and IT investment will also bring profit and benefit for the business.

**Index Terms:** Global Logistics Management, Business Process Reengineering, Information Technology, Business Performance

## The Social Model of the Korean Welfare State

Seung Jae Oh <sup>1\*</sup>, Eungu Ji <sup>2</sup>, MinJoo Kim <sup>3</sup>

<sup>1,2,3</sup>BK21PLUS Training center for social integration expert Keimyung University Doctor Student Daegu, South Korea

**Corresponding email:** osg4608@naver.com

---

This study is an exploratory study to identify the characteristics of Korean welfare state. In order to clarify the characteristics of Korean welfare state, we applied the social model that explains development of the welfare state and tried to typify it by using various statistical indicators that are on the social welfare part of OECD countries. In order to achieve the purpose of this study, cluster analysis was used as a research method and data were used from the most recent OECD data. For this, SPSS version 20 and AMOS 21(?) were used. As a result, Korea was included in the type of underdeveloped welfare state with Mexico and Chile despite the huge economy size. The implication of the study shows that it was necessary to expand welfare services to match the economic level.

**Index Terms:** Korea Welfare State, Typology of Welfare State, Social Model, Welfare Generosity Ratio

## Critical Pragmatic Organizational Cognition: The Case for an Embodied Perspective

W. David Holford \*

University of Quebec at Montreal (UQAM), Canada

**Corresponding email:** holford.w\_david@uqam.ca

---

The basic ontological and epistemological premises on which the proposed research in organizational cognition is based on is four-fold: 1. A minimalist stance in regards to reality from which both social and radical constructivists (Latour, 1992; Glasersfeld, 2002) find solace that is, a reality too complex to represent and model, leading us forth towards a pragmatic realism (James, 1955; Dewey 1929). 2. Such a realism that is non-categorical and non-modernist, and as such is open to a dynamic and entangled view of the world (Latour 1992; Orlikowski, 2002; Barad, 2007). 3. An inherently constructionist and anti-representational stance open to both interpretation as cuts by consensus (Barad, 2007) and individual/inter-individual subjectivities (Glasersfeld, 2002) 4. Agency emerges both from human and non-human potentials in the form of enactments agency is not something that one has but rather is a result of a relationship as intra-action between mutually constitutive bodies (Barad, 2007)

This leads us to various streams of cognition, principally based on embodied cognition and radical embodied cognitive sciences (Chemero, 2009).

**Index Terms:** Pragmatic, Cognition, Epistemological



## **Conference Abstracts**

### **Track B: Engineering Technology & Applied Sciences**

# Thermal Examinaton of the Healing Process after Carpal Tunnel Syndrome Operaton

Murat Selek <sup>1</sup>, Yavuz Selm Taspnar <sup>2\*</sup>

<sup>1</sup>Konya Technical University, Konya

<sup>2</sup>Selcuk University, Konya

**Corresponding email:** ytaspinar@selcuk.edu.tr

---

The median nerve passes through a tunnel in the wrist. This tunnel is called the wrist channel. The median nerve trapped in this canal is called carpal tunnel syndrome. Although the condition of the condition is not fully clarified due to many reasons, it is accepted that repetitive and compulsive movements in the wrist during the water holding period facilitate the formation of this syndrome. Although there are various treatments and measures in the early stages of the syndrome, surgical interventions may be necessary in the advanced stages. In our study, the healing process of the surgical incision in the wrist was followed with thermal images after these operations performed with local anesthesia. A patient who was operated on his right wrist was chosen as the subject. After the operation, the thermal image of the operated area was started. The thermal imaging of the wrist was performed with the FLIR ThermaCAM E45 thermal camera for 15 days in the morning and in the evening. The obtained images were examined by the camera's own program. When the images were examined, it was found that the temperature of the surgical incision for 15 days was 38,4466 C due to the excess blood circulation in the region. During the healing process, it was observed that the operating area reached to the highest temperatures at 38.95 C on the 3rd day and 39.9 C on the 7th day. After 22 days, the temperature of the incision was found to reach normal body temperature. In order to minimize the error rates of the temperature data in the thermal images affected by the ambient temperature, the ambient temperatures are brought to a constant temperature in all the images.

**Index Terms:** Carpal tunnel, Thermal image, Healing Process, Surgery

## Upcoming Events

---

---

<https://association-eta.com/itcg-aug-19/>

---

<https://association-eta.com/deas-aug-19/>

---

<https://association-eta.com/rdei-sep-19/>

---

<https://association-eta.com/itas-sep-19/>

---

<https://association-eta.com/esab-oct-19/>

---

<https://association-eta.com/aera-oct-19/>

---

<https://association-eta.com/>

---

