The Advances in Electrical and Electronic Engineering journal invites authors to submit articles into the issue devoted to recent developments on Advanced Signal Processing Techniques topics. Both review and research papers are welcome. This special theme issue is planed to be published in **September 2017**. The purpose of this special theme issue to present a collection of original papers that give an overview of current progress of research, development, and applications of advanced signal processing techniques.

Scope of the special issue:

The major topics of interest include (but topics are not limited in the field of signal processing techniques):

- Biomedical Signal Processing
- Fetal ECG Signal Processing
- Visualization and Monitoring Systems
- Smart Home Care
- Smart Metering and Data Processing
- Automatic Sleep Staging
- Advanced Control and Optimization Algorithms
- Modeling and Simulation
- Digital Processing of Speech Signals
- Software-Defined Radio
- Speech Signal Synthesis Methods
- Signal Processing Modification and Optimization
- Wireless Channel (Software) Equalization
- Cognitive Radio
- 5th Generation Mobile Networks
- Industry 4.0
- Fiber-optic Sensor System
- Power Quality Improvement
- Wavelet Based Techniques
- Blind Source Separation
- Independent Component Analysis
- Principle Component Analysis
- Singular Value Decomposition
- Soft Computing
- Adaptive Fuzzy Systems
- Adaptive Neuro-Fuzzy Inference Systems
- Active Noise Control
- Active Noise Reduction
- Digital Filter Design and Implementation
- Adaptive Filter Design and Implementation
- Channel Estimation and Equalization
- Universal Software Radio Peripheral

Important Dates:

Submission Deadline	March 31, 2017
Review Result Notification	May 30, 2017
Final Manuscript Due	June 30, 2017
Acceptance Notification	July 31, 2017
Tentative Publication Date	September 30, 2017

SJR_{2015}: 0.207 $SNIP_{2015}$: 0.819

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Submission Instructions:

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Preferred formats for your manuscript are:

- doc, docx, rtf, odt, PDF only if you write your article in LaTeX (PDF file is uploaded as article, but LaTeX version of your article together with all figures, tables are uploaded as supplementary files). The pictures, charts and diagrams, which are listed in the article, have to be sent as enclosure in a one of formats listed below with 600 dpi or better.

Other formats are not accepted. The designation and description of images has to be accord the template for authors. We are primary preferring delivery of all pictures, charts and diagrams in supplementary file in vector format for the reason of articles transcription into the LaTeX template version.

Also we are asking all authors that are interested in publish their scientific work in this special theme issue to write into the Comments for Reviewer item "Special Theme Issue on The Application of Advanced Signal Processing Techniques" during article submission to mark that their article is intended for publishing in this special issue. There are no page charges for publication in this special issue.

Guest Editors:

Prof. Homer Nazeran (University of Texas El Paso, USA).

Homer Nazeran holds BS, MS and PhD degrees in Electrical (Honors), Clinical and Biomedical Engineering from UT Austin, Case Western Reserve and University of Texas Southwestern Medical Center (UTSWM) at Dallas/UTA, respectively.
He has close to 3 decades of experience in industry and academia and has practiced and taught biomedical engineering in the Middle East, Europe, Australia and USA. In Australia, with Professor Andrew Downing he co-founded the School of Engineering at the Flinders University of South Australia, introduced and established the electrical and electronics and biomedical engineering degree programs (1991 to 2001). He returned to the University of Texas at Arlington as a visiting professor in 1997 and 2001. He joined UTEP in 2002 to create and establish biomedical engineering degree programs at the Department of Electrical and Computer Engineering.
His research interests are in the areas of computer modeling of physiological systems, intelligent biomedical instrumentation and biomedical signal processing as applied to chronic health conditions and telemedicine. He has more than 150 journal and conference articles in his research areas published in IEEE Engineering in Medicine and Biology Society (EMBS) and other flagship international conference proceedings. He is a reviewer for several national and international journals in his related fields including IEEE Transactions on Biomedical Engineering, Medical and Biological Engineering and Computing, Biomedical Engineering Online and others. His teaching interests are in electronics, biomedical instrumentation, physiological systems, and biomedical signal processing. He is also interested in development of novel teaching methods, lifelong learning and critical thinking habits in the classroom and interdisciplinary education based on application of nonlinear dynamics systems (complexity) theory. His research, teaching and professional activities have been supported by NIH, NSF, and DOE among others.

Dr. Radek Martinek (VSB - Technical University of Ostrava, Czech Republic)

Radek Martinek received Master´s degree in Information and Communication Technology from Technical University of Ostrava in 2009. Since 2012 he worked here as a research fellow. In 2014 he successfully defended his dissertation thesis titled „The use of complex adaptive methods of signal processing for refining the diagnostic quality of the abdominal fetal electrocardiogram“. He works as an assistant professor at Technical University of Ostrava since 2014. In 2016 he became the Layout Editor in journal Advances in Electrical and Electronic Engineering.
His current research interests include: Digital Signal Processing (Linear and Adaptive Filtering, Soft Computing - Artificial Intelligence and Adaptive Fuzzy Systems, Non-Adaptive Methods, Biological Signal Processing, Digital Processing of Speech Signals), Wireless Communications (Software-Defined Radio), Optical Wireless Communication, Power Quality Improvement. He has more than 70 journal and conference articles in his research areas.