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# Call for Papers: Special Session within KES 2006, Bournemouth UK

<http://kes2006.kesinternational.org/>

## Special Session Chairs:

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## Invited session IS73:

### "Signal Processing Techniques for Knowledge Extraction and Information Fusion"

#### Scope

Knowledge extraction and information fusion have long been studied in various areas of computer science, and the number of applications for this class of techniques has been steadily growing. Since features and other parameters that describe a process under consideration are extracted directly from the data, it is natural to ask ourselves whether we can use signal processing techniques for this purpose. This has tremendous potential, since DSP techniques are well equipped for problems where noise, uncertainty and complexity play major roles.

This special section therefore aims at bringing together researchers working in various fields of signal processing and related disciplines in order to consolidate the existing and propose new directions in SP based knowledge extraction and information fusion. We encourage contributions presenting both novel algorithms and existing applications, especially those (but not restricted to) on-line processing of real world data.

#### The key areas of interest are

- DSP based knowledge extraction
- Sparseness as an information fusion criterion
- Data and sensor fusion
- Signal extraction based on their fundamental properties (nonlinearity, smoothness)
- Blind source extraction
- Transform domain and subspace techniques
- Advanced classification and clustering
- Information theoretical approaches
- Biomedical applications
- Industrial and environmental applications

#### Deadlines

Submission of papers via PROSE system:	<b>March 31, 2006</b>
Notification of acceptance:	<b>April 15, 2006</b>
Final papers to be received by:	<b>April 25, 2006</b>

#### Paper submission details

Please follow the paper submission guidelines at the [KES2006 Paper Submission](#) page. All the papers must be submitted using PROSE submission system. When in PROSE choose session "IS73 - Signal Processing Techniques for Knowledge Extraction and Information Fusion". For inquiries about the special session, please contact directly Tomasz Rutkowski ([tomek@brain.riken.jp](mailto:tomek@brain.riken.jp))

#### Session's website with up to date information

<http://www.bsp.brain.riken.jp/kes2006session/>