



## Innovation in Medicine and Healthcare – InMed'13

### INVITED SESSION SUMMARY

**Title of Session:**

“Innovative approach to medical interventions and countermeasures”

**Name, Title and Affiliation of Chair:**

Dr John Ronczka (Australian Society of Rheology - <http://www.rheology.org.au>)

**Details of Session (including aim and scope):****AIM:**

To emphasize the use of innovative smart (e.g. artificial wisdom intelligence) medical devices, techniques and materials as interventions and countermeasures.

**SCOPE:**

Within the 'health system' (NS) from first responders, triage to intensive and after care may be suggested to be supported by 'intelligent decision technologies' (IDT). There is a requirement to have relevant innovative medical technologies availability to medical professionals', practitioners, researchers and patients 'anywhere—anytime—anyplace—anydevice—anyentity' (A5).

A 'system of systems' (SoS), that is a 'Human Sustainment System' (HSS) within the 'health system' (NS) requires medical intervention and countermeasure tools, medicines and techniques to be similar ('anywhere—anytime—anyplace—anydevice—anyentity' (A5)).

A desired outcome of this session is to present research and development in smart (e.g. artificial wisdom intelligence) medical devices, techniques and materials.

**RHEOLOGY CONTEXT:**

Organ additive fabrication or biofabrication has provided the opportunity for rheology to play a key role in developing polymer scaffolds to light medical biorheological devices. The developed biorheological material and devices might not only be used in biofabrication but take the next step as a countermeasure or intervention. As an example, by developing biorheological creams, gels, glues, slims or foams that could be biofabricated as programmed logic controllers through to artificial wisdom intelligent based systems to overcome various related patient medical conditions. (Reference medical devices: [maecourses.ucsd.edu/~sujin/mae250-sp09/Med%20Device%20Lecture1.pdf](http://maecourses.ucsd.edu/~sujin/mae250-sp09/Med%20Device%20Lecture1.pdf) )

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):**

Current innovative medical professional, practitioners and researchers with proven and work-in-progress research and development in smart (e.g. artificial wisdom intelligence) medical devices, techniques and materials.

**Website URL of Call for Papers (if any):**

**InMed-13, 17-19 July, Piraeus, Greece:** <http://inmed-13.innovationkt.org/>

**Email & Contact Details:**

[ronczkaj@ozemail.com.au](mailto:ronczkaj@ozemail.com.au)