

# International Workshop on Accelerated Radical Innovation

## *Global Technology Cluster Development Challenges*

**IWARI 2005**

March 10--12, 2005

Sponsored By: University of Toledo, Toledo, Ohio, USA

### ***Grand Challenge Invitation - Call for Contributions***

*For Review Beginning Dec. 1, 2004*

#### ***Purpose of the Workshop***

As an evolving community of accelerated radical innovation research and practice, our ultimate objective is to create a new discipline of accelerated radical innovation - a conceptual framework of knowledge, principles, information technology (IT) tools and methodologies - and to facilitate the application of this new discipline by innovators in many domains and around the world.

Members of our community met for the first time at the First ECI Conference on “Accelerating the Radical Innovation Process,” held in May, 2004 in Charleston, South Carolina (for further discussion, see Dismukes 2004, on the website). Some fifty leading scholars and industrial practitioners of radical innovation from around the world started the process of putting the emerging discipline of ***accelerated radical innovation*** on a firmer footing and bringing it into the mainstream of innovation practice. ***For a further discussion of this new discipline, see “What is Accelerated Radical Innovation?”***(on the *IWARI 2005 Website*)



The March 10-12, 2005 Toledo Workshop represents the second step in our journey toward that new paradigm. For this second event the format is different: it is a *workshop*, where we will gather to assess the challenges, hurdles and opportunities, and to share available and potential approaches to meeting these challenges. Our objective is to arrive at **a conceptual framework for ARI** that we intend to jointly publish in an international journal and that will guide future ARI research and practice.



#### ***How we will get there – the Grand Challenge Invitation***

About 80% of the Workshop will be devoted to Workgroup breakouts and Brainstorming sessions. This Call for Contributions describes what the workshop grand challenges are and explains how interested participants can propose a contribution.

To accomplish this ambitious purpose, we need to start now and continue over the next few months the challenging work of assembling our reflections and observations, our research, our experience, and the innovation tools and processes that we have developed or used. We will use the workshop for melding our insights and results into the new ARI conceptual framework. We invite senior professionals from industry, academia, and government to join us in this ambitious endeavor as contributors, moderators and facilitators in our working group sessions.



## Organization of the Workshop Grand Challenges: Where can you contribute?

Each of those who choose to participate in the workshop brings a unique and valuable perspective on how a new paradigm of accelerated radical innovation can be brought about - experience or personal exposure within a particular industry or organizational function, scholarship within an academic discipline, etc. How can this valuable range of perspectives be brought together into the unified set of principles and tools we seek?

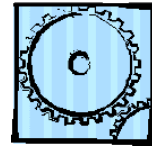
As a point of departure, we propose some the challenges that radical innovators should be expected to address *irrespective of their industry*. Of course radical innovators face technical and market challenges just as do those who manage incremental innovation. But radical innovation is also likely to be destabilizing or disruptive – to the organizations in which it occurs and to the larger society in which existing practices, beliefs, and technologies are deeply embedded. Examples of challenges from each category are provided below.

### Challenges typically associated with accelerated radical innovation

#### Scientific and technological challenges



The most common challenges associated with radical innovation, but by no means the most significant, are technical challenges. These encompass missing or underdeveloped technologies, unproven processes, gaps in underlying science, inaccessible technology (due to patents, for example), and problems with manufacturability or scale-up to commercial levels.



#### Market/societal challenges



Challenges typically associated with market acceptance and penetration include not having a defined market, moving into an unfamiliar market, innovation that requires major behavioral changes by users, innovation that obsoletes users' previous investments, and adopters' fears about civil liability.

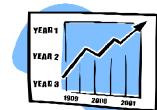
One of the defining characteristics of radical innovation is that it is likely to upset the existing social order. For an increasing number of innovations with technical or economic merit, even when willing users are available, the technology is getting ahead of societies' willingness to absorb it. For example, acceptance to await the resolution of legal, regulatory, or policy issues, such as rights, use of spectrum, or environmental or health concerns. Certain forms of radical innovation may challenge deeply held cultural beliefs such as the sanctity of life, civil liberties, or specific social taboos.



#### Business/organizational (firm level) challenges



Even when a radical innovation makes sense from a technical and market perspective, there often remain significant firm level challenges. These would include financial pressures (e.g., a short-term financial perspective), the lack of a business model (not knowing how to profit from the innovation), or conflicts with an existing product line, business model, or set of core competencies.



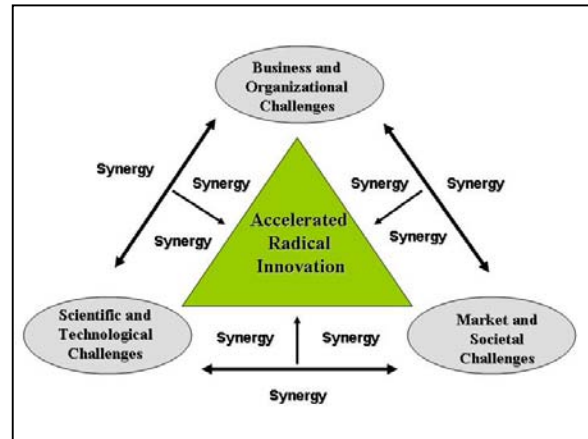
## Other



These categories are merely illustrative, and *not* intended constrain your thinking about the challenges facing accelerated radical innovation. If you believe your contribution falls outside these categories, feel free to propose it.

## The ultimate challenge - bringing it all together

The workshop faces one last challenge – how to gain synergistic interaction among the three elements. For example, addressing scientific and technological challenges without a business context may actually *decelerate* innovation because additional time is required to reconstruct a business value proposition. While most participants in the innovation process focus their energies on just one of these three sources, our ultimate ARI conceptual foundation must offer an integrative frame that provides for early, seamless interaction across them and identifies value for all three stakeholders.



## **How to contribute – workgroup, poster/paper or both**

After reviewing the grand challenge categories, decide where you wish to make a contribution. In addition to participating in the working groups you are invited to develop a poster session paper to be displayed during the workshop. If you choose to write up your poster session paper as a peer-reviewed manuscript, it will be referred for review by an internationally recognized electronic journal, **The Industrial Geographer**, a peer-reviewed electronic journal focusing on technology and economic cluster development. (See *guidelines on IWARI 2005 Website*).

## **Submitting an essay or abstract**



As part of the application and registration process, interested participants are requested to submit essays on the Grand Challenges for Accelerated Radical Innovation following instructions on the IWARI 2005 Website.

Prepare a brief essay (up to 250 words) describing the contribution you propose to make, how it would contribute to an ARI conceptual framework, and indicate your background/perspective (university, industry, etc.) Submit the essay electronically to the IWARI 2005 website for evaluation beginning Dec. 1, 2004. Notification of acceptance to all contributors begins Feb. 1, 2005. The essays will be collected and published in the Workshop Program to be distributed to attendees at registration, March 10, 2005.

## ***If you are proposing a poster session paper...***

In addition to the essay, please submit an abstract of up to 250 words that follows IWARI 2005 Website guidelines. Abstracts will be reviewed by the IWARI 2005 Advisory Committee.