

# Rapid Technology Intelligence Process (RTIP)

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# A New Dawn in Managing Technology

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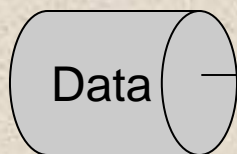
- A. Management of Technology (MOT) has been largely *intuitive*
- B. Patent, R&D publication, and business information resources are rich sources of *empirical* intelligence
- C. Need to add "B" to "A"
- D. Goal = qualitatively better MOT

# RTIP: Rapid Technology Intelligence Process

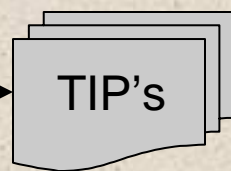
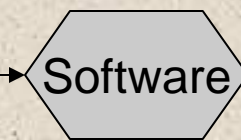
- Objective:
  - Pointed & Timely Technology Decision Support
- Tools:
  - Desktop access to databases
  - '**Tech Mining**' approach
  - Standardizing
  - Semi-automating

# Tech Mining Players & Process

Patent & R&D  
Publication  
Databases



Clean,  
Analyze,  
Visualize



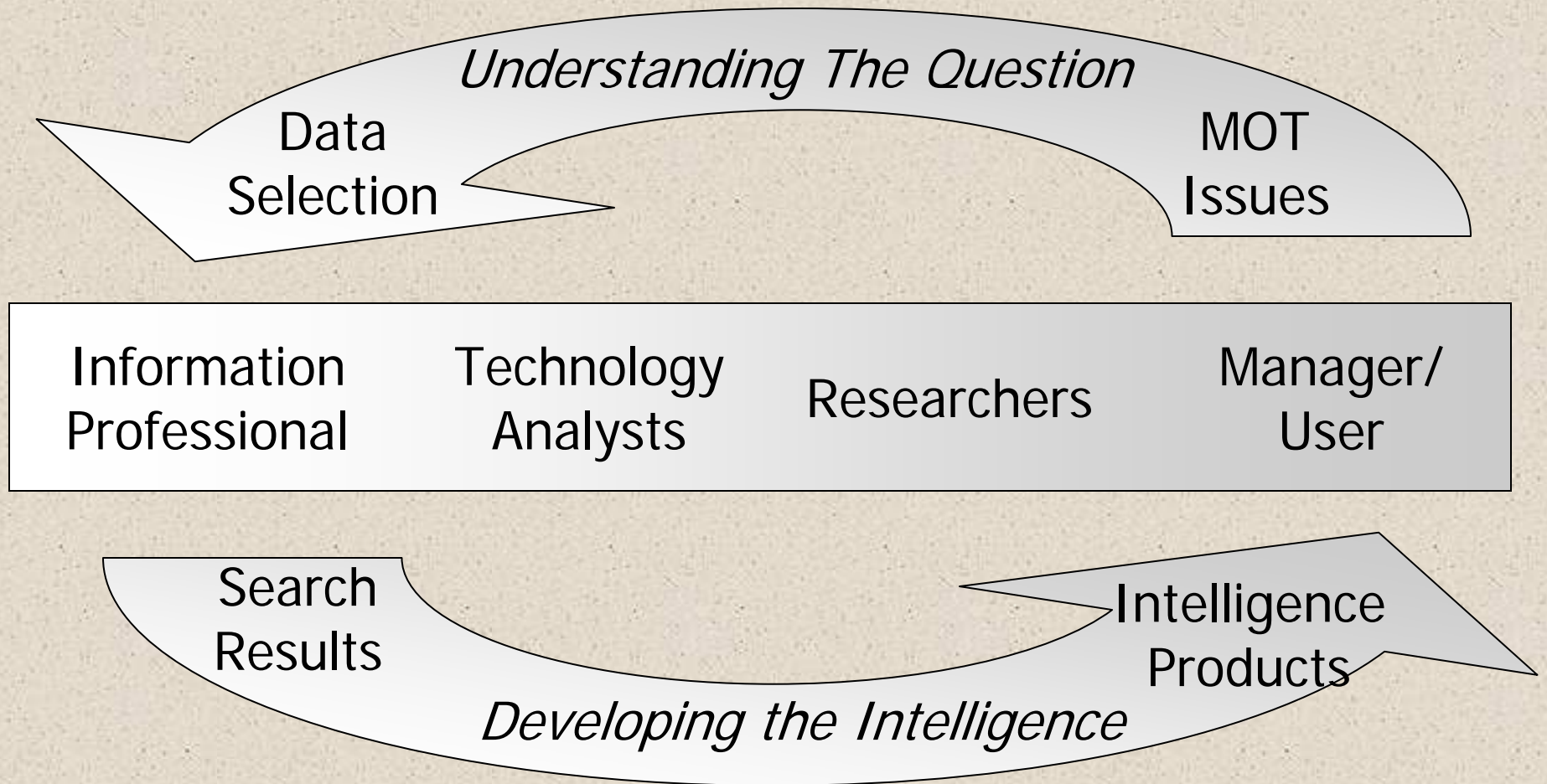
**Good Decisions  
demand both  
Analytical Products  
and  
Expert Interpretation**

**Technology Intelligence  
Products**

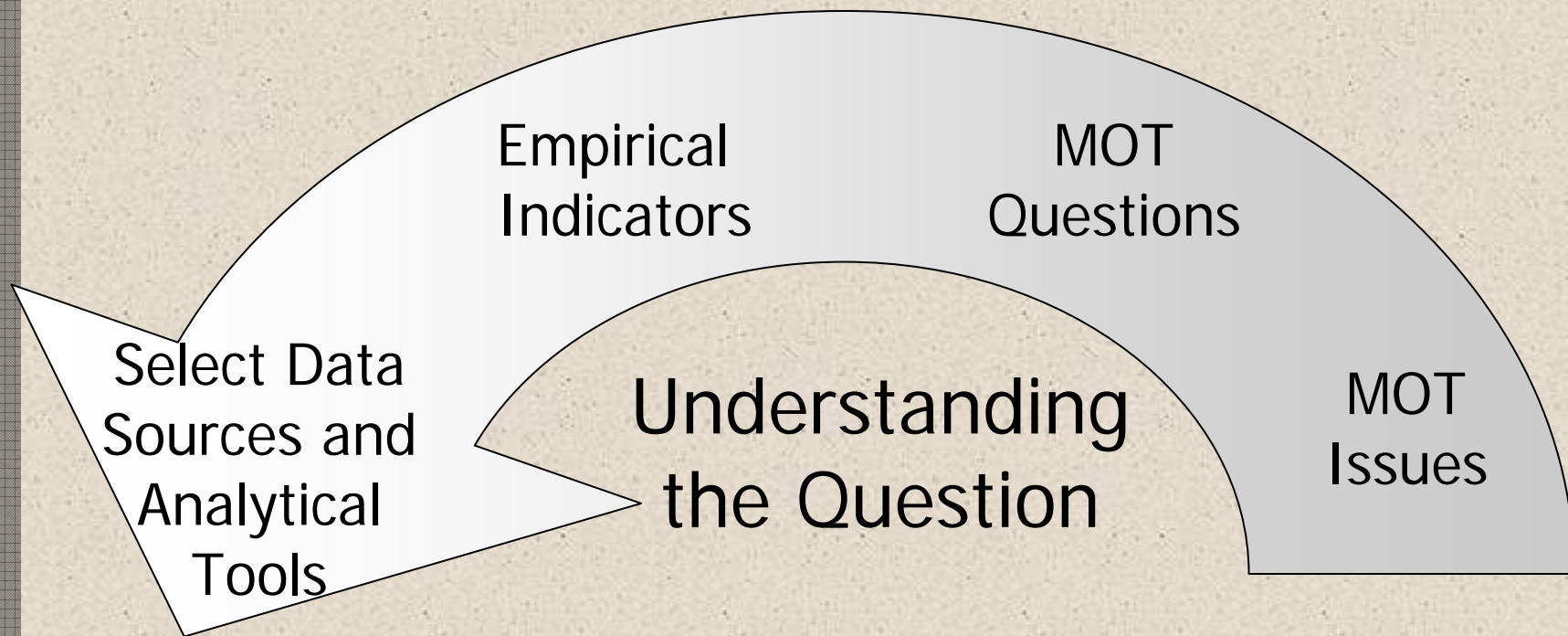


**Expert  
Opinion**

# Tech Mining Players & Process



# Tech Mining Steps and Roles (1 of 2)



Information Professional	Technology Analysts	Researchers	Manager/ User
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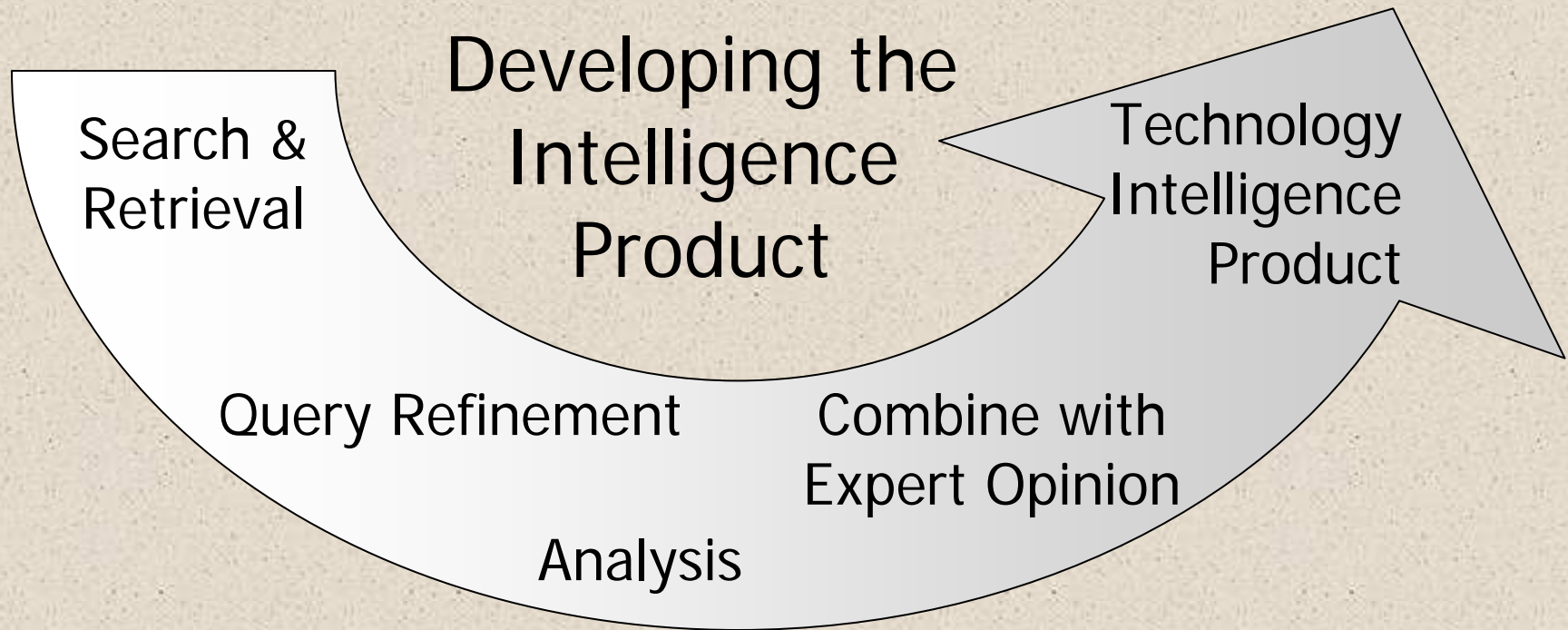
# Tech Mining Steps and Roles (2 of 2)

Information  
Professional

Technology  
Analysts

Researchers

Manager/  
User



# RTIP Framework

- Understand the Technological Innovation Process
- Spell out Management of Technology (MOT) Issues
- Break out particular MOT Questions
- Identify candidate empirical Indicators



- Effect composite Representations, rapidly (1 day)

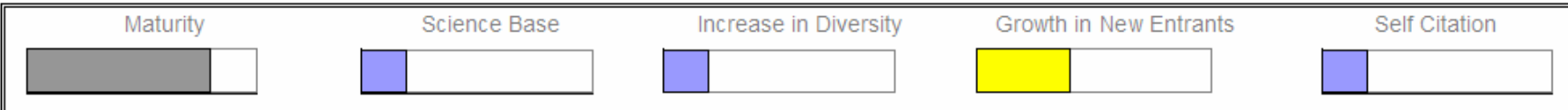


# Technology Information Products: "One-Pagers"

- Compile indicators to answer one technology management issue
- Specialize the answers to fit the questions

# Technology Profile: INTUMESCENT

## Score Card



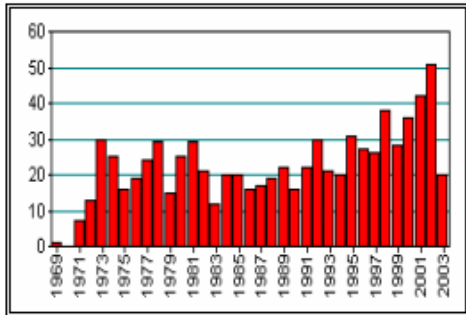
## Top Patent Assignees

Assignee	Inventors	Top IPC Classes	Issue Pattern
Minnesota Mining and Manufacturing Company[37]	Graham, Joseph [5]; LANGER, Roger, L. [4]; DYKHOFF, Michael, G. [3]	C09K02114 [4]; C09D00518 [4]; C09K02100 [3]	
Bayer Aktiengesellschaft[19]	von Bonin, Wulf[19]; von Gizycki, Ulrich [2]	C08G01814 [4]; C09K02100 [3]; C09K02114 [3]	
Dixon International Limited[13]	Malcolm-Brown, Tessa [7]; Southern, Eric [3]; Tanner, Robert Alfred [2]	E06B00518 [3]; A62C00314 [2]; C09K02114 [2]	
PPG Industries, Inc.[9]	Ward, Thomas A. [7]; Seiner, Jerome A. [5]; Heber, Robert W. [2]	C08G07902 [2]; C09J00502 [2]; C09K02114 [1]	
GLAVERBEL[8]	Not Available [3]; De Boel, Marcel [2]; Goelff Pierre [2]	B32B01706 [5]; B32B00900 [2]; C03C01736 [1]	
AlliedSignal Inc.[8]	Olzak, Richard A. [4]; Jablon, Michael [2]; Kersten, Gary [2]	C08F28300 [1]; H05K00502 [1]; H05K00506 [1]	

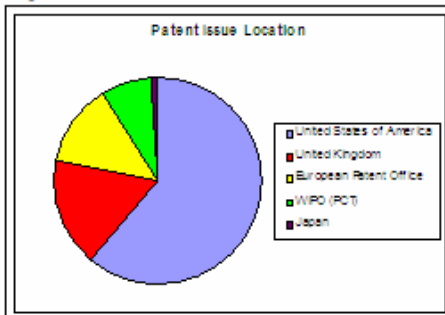
## Major Issue Areas



## Total Time Trend



## Country of Issue



WARD, Derek, Alfred[26]	ENVIRONMENTAL SEALS LTD. [23];
von Bonin, Wulf[17]	Bayer Aktiengesellschaft [17];
Pirig, Wolf-Dieter[8]	Clariant GmbH [5];
Feldman, Ruben[7]	Nu-Chem, Inc. [3];
Ward, Thomas A.[7]	PPG Industries, Inc. [7]

## Companies Leaving the Sector

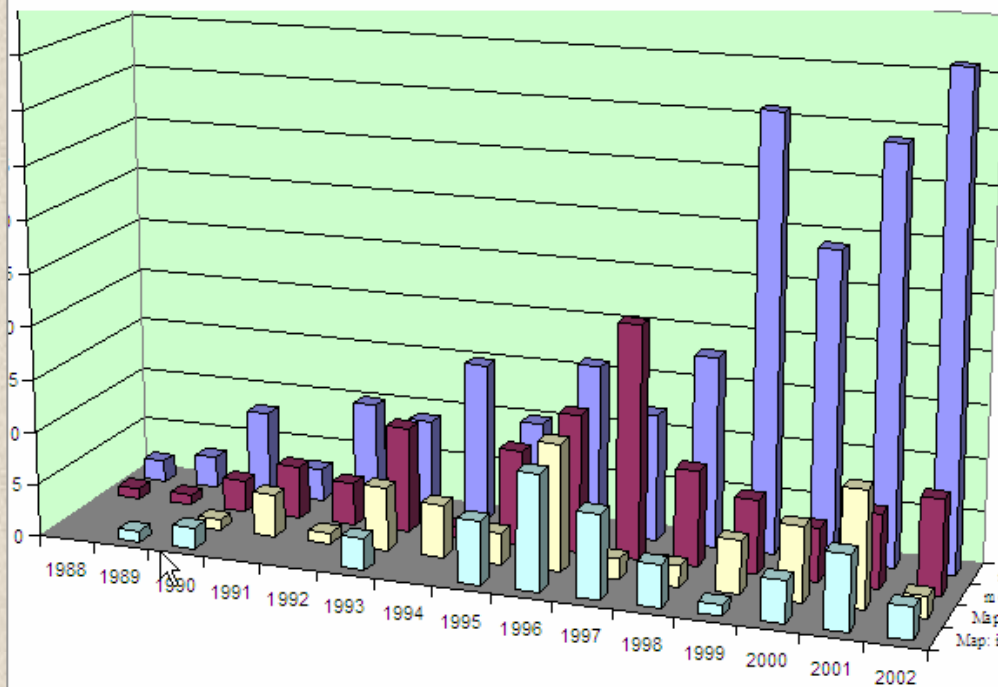
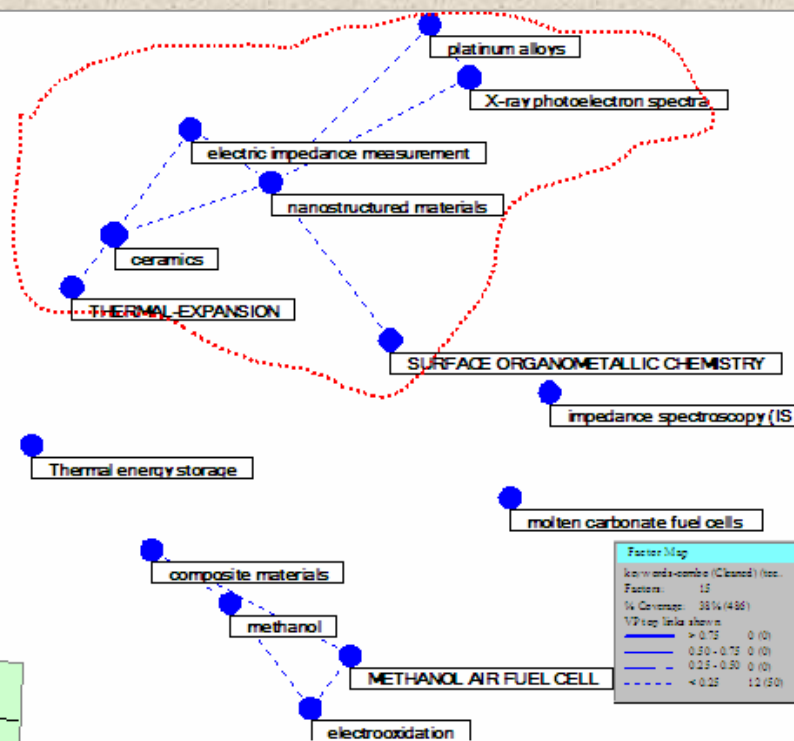
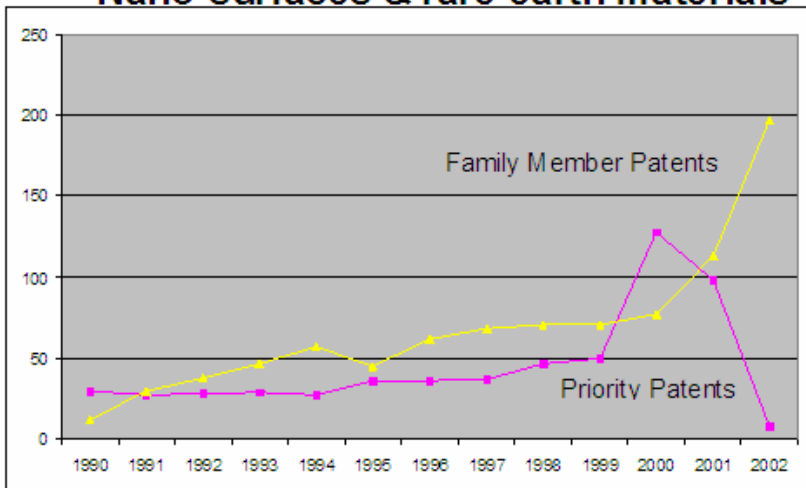
Assignee	Number of Patents	Year of Last Publication
Cities Service Oil Company	35	1977
Imperial Chemical Industries Limited	12	1988
BFG GLASSGROUP	10	1984
Monsanto Research Corporation	7	1981

## Profile a Technology

- Are there recent advances in Solid Oxide Fuel Cells (SOFC's) that we need to know about?

# What's Hot in Solid Oxide Fuel Cells?

## \*\* Nano-surfaces & rare-earth materials



**Hot Stuff? Nano-surfaces & rare-earth materials**

- \* **Activity** -- % during the last 3 years:
  - 261 articles – 44% last 3 years
  - 72 priority patents – 14% last 3 years
  - 133 family patents – 32% last 3 years
- \* **Conference/Journal Ratio**: 10% vs. 29% for SOFC
- \* **New Terms** include: chemisorption, free energy, isotope effects, glass-ceramics, surface segregation & diffusion
- \* **Patenting**: Siemens-Westinghouse, Allied-Signal, NGK Insulators

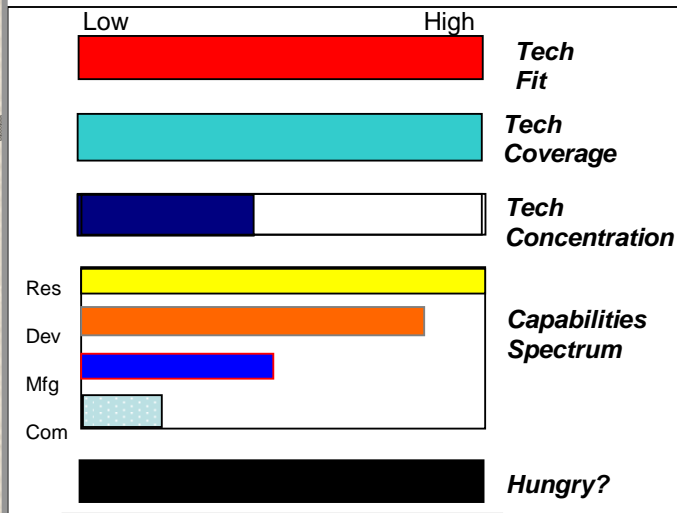
## Profile an Organization

- Might Ceramic Fuel Cells, Ltd., be the right partner to work with us on this Australian development?

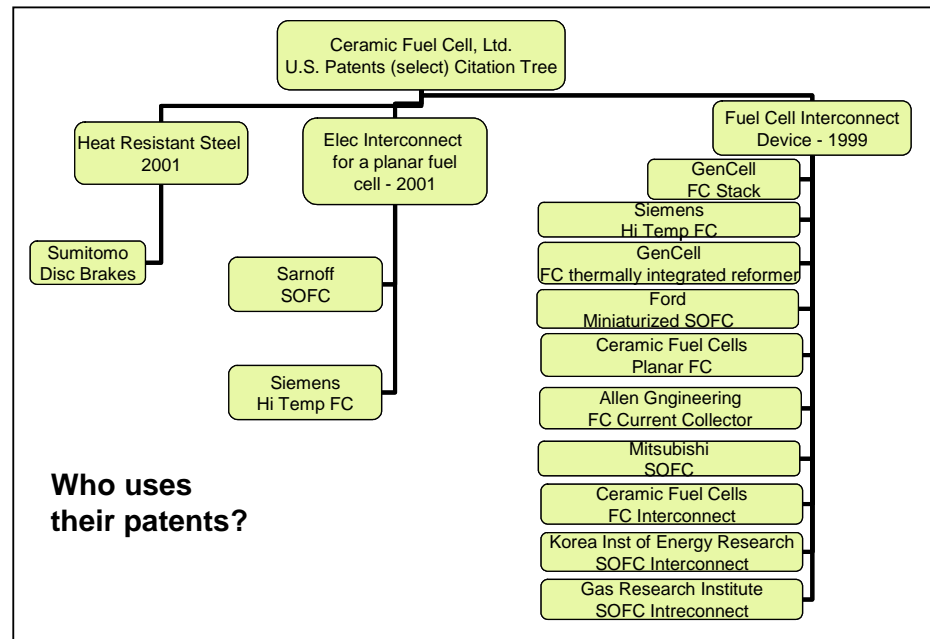
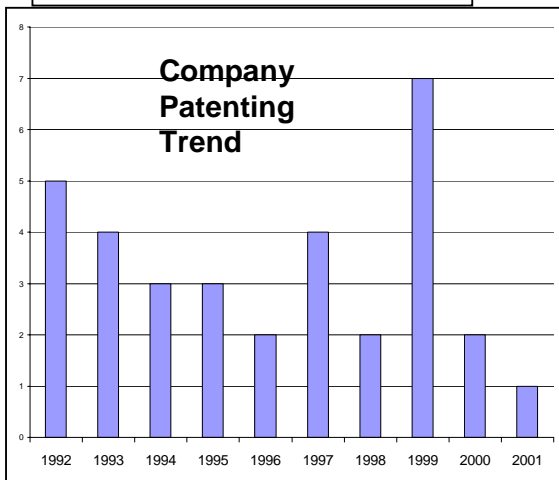
# Company at a Glance: Ceramic Fuel Cells Ltd.

<http://www.cfcl.com.au/>

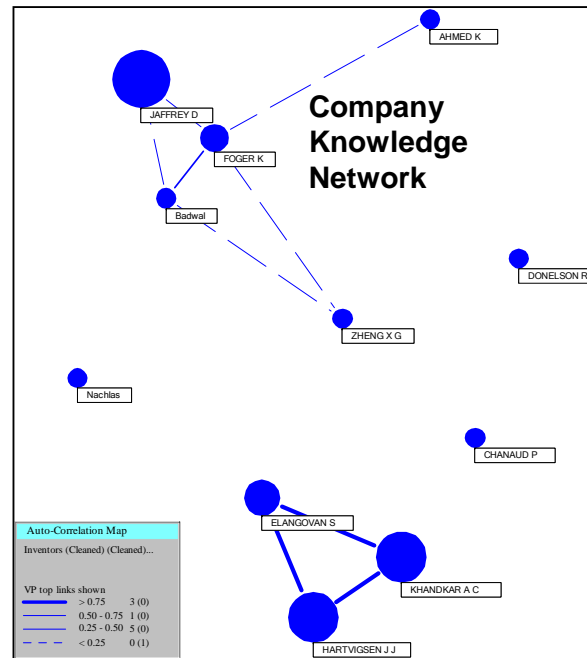
## SCORECARD



**Investors in the Company:**  
12 Organizations, including  
Australian manufacturing, power,  
gas, investment & government.



**Who uses their patents?**



Top Inventors	Top Authors
Jaffrey [8]	Badwal [22]
Foger [4]	Jiang [22]
Badwal [2]	Foger [16]
	Zhang [9]
	Ciacchi [8]
	Love [6]

**Next Step:**  
**Initiate contact with Foger or Badwal?**

# – Summary –

## Rapid Technology Intelligence Process

- Innovating in Innovation Management:
  - Various ways
  - Consumer Products Co.: We do a pilot; retarget – do more; collaborate; hand off
- Targets of Opportunity:
  - Stagegate processes
  - Spell out tools & information products at each stage
  - Notable successes
- RTIP Initiative:
  - Small consortial development of key tools
  - Gain experience cross-organization on analyses & indicators

# Resources

- ***Tech Mining: Exploiting New Technologies for Competitive Advantage***, Alan L. Porter & Scott W. Cunningham (Wiley, 2005)
- VantagePoint (product information, white papers)
  - [www.TheVantagePoint.com](http://www.TheVantagePoint.com)
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alan.porter@isye.gatech.edu or [aporter@searchtech.com](mailto:aporter@searchtech.com)

