Site

Client

proxystylesheet

Output

Search Site Search

allAreas

THOMSON REUTERS RESEARCH EXCELLENCE

# **INDIA RESEARCH FRONT AWARDS 2009**

JOIN US AT THOMSON **REUTERS RESEARCH EXCELLENCE – INDIA RESEARCH FRONT AWARDS 2009** 

Thomson Reuters Research Excellence – India Research Front Awards 2009 is hosted by the Healthcare and Science business of Thomson Reuters to



recognize India's most prominent scientists for their outstanding pioneering research and influential contribution to global R&D. This award event is part of our Asia Pacific Research Days which recognize research excellence in countries and regions demonstrating they are leading the world through innovation in their respective fields.

**Awardees Methodology** Downloads & Media Coverage

**RESEARCH FRONT NO. 1751 ADVANCED OXIDATION** PROCESSES AND TECHNIQUES

**RESEARCH FRONT NO. 1751 ADVANCED OXIDATION** PROCESSES AND TECHNIQUES



B. Pandit



Professor R. RESEARCH FRONT NO. 6810 ANTIOXIDANT METABOLISM AND Pannerselvam DEFENSE SYSTEM IN HIGHER PLANTS Dr. Abdul Jaleel RESEARCH FRONT NO. 6810 ANTIOXIDANT METABOLISM AND Cheruth DEFENSE SYSTEM IN HIGHER PLANTS R Dr. Ragupathi Gopi RESEARCH FRONT NO. 6810 ANTIOXIDANT METABOLISM AND R **DEFENSE SYSTEM IN HIGHER PLANTS** Dr. G P S Raghava RESEARCH FRONT NO. 7435 MHC BINDING, USING SVM Dr. Manoj Bhasin RESEARCH FRONT NO. 7435 MHC BINDING, USING SVM R Dr. Ayyappanpillai **RESEARCH FRONT NO. 9007 CHIRALITY-SENSING** Ajavaghosh SUPRAMOLECULAR SYSTEMS

## **RESEARCH FRONT METHODOLOGY**

Research areas in Science, particularly those at the cutting edge of their fields, are characterized by patterns of intense communication between scientists. This communication manifests itself in various ways, both formally and informally, but prominent among these are citations from one scientist's work to another. Patterns of citation reflect a fine-grained selection process of how scientists build on each others' work, and the relationship of these works to one another. Such patterns can be used to create a picture of the state of a specific research area in terms of the papers that constitute its core of seminal work. The first step in identifying research fronts is thus the selection of these seminal works by making a comprehensive inventory of highly cited papers across the disciplines of science.

#### **STEP 1: HIGHLY CITED PAPERS**

Highly Cited Papers are the building blocks of Research Fronts, and are defined as the top 1% of papers in each different discipline. The selection is based on the cumulative citation counts received by papers. To pick the top percentile of papers, citation thresholds are set separately for each year and discipline (see <a href="http://sciencewatch.com/about/met/thres-highlyctd">http://sciencewatch.com/about/met/thres-highlyctd</a>) for a typical set of thresholds for the current bi-monthly update.

#### STEP 2: FORMATION OF RESEARCH FRONTS USING CO-CITATION PATTERN

The next step is to discover how these highly cited works are related to each other by drawing on the scientists' won perceptions and usage patterns. The procedure to accomplish this in Essential Science indicators (ESI) by Thomson Reuters is called Research Front analysis. It is based on grouping Highly Cited Papers that have been co-cited – that is, how often they co-occur in the reference lists papers that cite them. Co-citation mirrors the concept associations of authors, and it has been found that

papers cited together frequently have significant conceptual or methodological relationships. The formation of these pair-wise relationships is followed by a clustering process that groups together papers linked at a pre-set threshold. Each Research Front grouping thus consists of a set of Highly Cited Papers bound together by strong co-citations. A name is applied to the front by a linguistic analysis of the titles of the papers.

Research Front analysis will not identify all research areas or all the papers in an area. However, it can assist in identifying areas where important work is being done and where the scientific community is focusing its attention. The methodology for creating research topics is described in <u>details</u> on ScienceWatch.

#### FREE RESOURCES

<u>Expert Essays:</u> find in-depth, explanatory information relating to citation databases and other information tools <u>Highly Cited.com</u>; your expert gateway to the most highly influential scientists and scholars worldwide

Programme Brochure PDF1.4 MB

Presentations Research and Innovation PDF7.4 MB Dr. R. Chidambaram

Science and R&D PDF28 KB Dr. Deepak Pental

# Research Front Methodology Leading Indian Scientists In Emerging Research Fronts <u>PDF1.6 MB</u>

Nobuko Miyairi

#### **Press Release**

- Thomson Reuters Honours India's Contribution To Global Research

#### In the News

Eight Indian scientists honoured for groundbreaking research - Andhravilas.com

Eight Indian scientists honoured for groundbreaking research - Aol.in

Eight Indian scientists honoured for groundbreaking research- Blog.southasianews.com

Eight Indian scientists honoured for groundbreaking research- blog.taragana.com

Thomson Reuters Honours Scientists - Business Standard-Hindi

Huge market for Information (Q & A with Nobuko) - Business Standard-Hindi

Eight Indian scientists honoured - businessweek.com

Thomson Reuters announces Indian global research excellence awards - congoo.com Thomson Reuters announces India Research Front Awards 2009 - crdd.osdd.net Eight Indian scientists honoured - Csir.res.in Eight Indian scientists honoured for groundbreaking research - Discuss.itacumens.com Thomson Reuters announces Indian global research excellence awards news- Domain-b.com 8 Indian scientists honoured for groundbreaking research - Expressbuzz.com Eight Indian scientists honoured for groundbreaking research - Headlines India Eight Indian scientists honoured for groundbreaking research - ians.com Eight Indian scientists honoured for groundbreaking research - India Today Eight Indian scientists honoured for groundbreaking research - India-forums.com Eight Indian scientists honoured for groundbreaking research - indianbiotechobserver.com Eight Indian scientists honoured for groundbreaking research - Indiaenews.com Eight Indian scientists honoured for groundbreaking research - Indiaprwire.com Eight Indian scientists honoured for groundbreaking research - Newkerala.com 8 Indian scientists honoured for groundbreaking research - News.bizhat.com Eight Indian scientists honoured for groundbreaking research - Newshopper.sulekha.com Indians honoured for global research - overseasindian.in Thomson Reuters announces India Research Front Awards 2009 - pharmabiz.com Eight Indian scientists honoured for groundbreaking research - rediff.com 8 Indian scientists honoured - Sify.com Eight Indian scientists honoured for groundbreaking research - Siliconindia.com Eight Indian scientists honoured for groundbreaking research - Thaindian.com English an advantage to Indian scientific research - The Financial Express Eight Indian scientists honoured - The Statesman Eight Indian scientists honoured for groundbreaking research - Theindianstar.com Eight Indian scientists honoured for groundbreaking research - Topix.com Eight Indian scientists honoured for groundbreaking research - Twocircles.com Eight Indian scientists honoured for groundbreaking research - xbrl.rienks.biz

Eight Indian scientists honoured for groundbreaking research - Yahoo.com

8 Indian scientists honoured for research - Zee News

### **To View the Photos Click Here**

<u>SCIENCEWATCH.COM</u> Tracking trends and performance in basic research.

INDIA'S NEW MILLENNIUM IN SCIENCE

FREE SCIENCE RESOURCES

THOUGHT LEADERSHIP

THOMSON REUTERS RESEARCH EXCELLENCE IN ASIA PACIFIC

Intelligent Information for Life



Where does your inspiration come from?

Animangsu Ghatak found his in the toe pads of tree frogs.

DISCOVER LIFE-CHANGING RESEARCH AND INNOVATION FROM AROUND THE GLOBE.

© 2015 Thomson Reuters

