



**SAHYADRI**  
EDUCATIONAL INSTITUTIONS

  
**E-Journal**

Bi-Monthly Publication

Email: [editorjournal@sahyadri.edu.in](mailto:editorjournal@sahyadri.edu.in)

Website: [www.sahyadri.edu.in](http://www.sahyadri.edu.in)

Vol 2 Issue 4

July-2012

**Research Articles**

**Medical Tourism in India- A Conceptual Study**

**Foreign Direct Investment**

**Building Implosion**

**Mobile Irrigation**

**Commentary**

**Digital Jewellery**

**Research Minds**



## Contents

### Advisors

Dr. D. L. Prabhakara  
Dr. Umesh M. Bhushi

### Editorial Board

Editor

Dr. K. Vidyavathi

Co-Editor

Mr. Sunil Kumar

Mr. Shobhan Kumar

Ms. Neetha Kamath

### Streams

- Engineering
- Management
- Health Sciences
- Technology
- Science

### Disclaimer

The individual authors are solely responsible for infringement, if any, of Intellectual Property Rights of third parties. The views expressed are those of the authors. The articles are not intended to be definitive and should not be relied upon as a substitute for specialist advice.

For Internal Circulation Only

### Editorial

- Dr. Vidyavathi

### Research Articles

- **Medical Tourism in India- A Conceptual Study**  
Andrea Divya D'Cunha<sup>1</sup>, Thriphy<sup>2</sup>
- **Foreign Direct Investment**  
Lanwil Daril D'Souza
- **Building Implosion**  
Sasha Rai
- **Mobile Irrigation**  
Shobhan Kumar

### Commentary

- **Digital Jewellery**  
Jackline Sharol





Dr. K Vidyavathi

Sahyadri College of Engineering and Management is the institution where scholarly activity and innovation are valued and encouraged. A lot of learning occurs when students do research. Involvement in research engages their intellectual curiosity, satisfies their thirst for discovery, and gives them an outlet for their creativity. Research not only produces new knowledge, it deepens and broadens the experience of managers and engineers who will go on to apply that experience in many productive ways. Independent research offers students a taste of the culture of research and life as a scientist.

Undergraduate and postgraduate students in the Sahyadri educational institutions are highly exposed to research experiences like presentation of research papers, exhibition of their projects, publication of their research works and inspirational talks and lectures by eminent scientists who visit Sahyadri campus. Sahyadri students are fortunate to have a wide range of opportunities and facilities available to participate in meaningful and exciting research experiences under the guidance of members of faculty.

RESEARCH MINDS- E Journal of Sahyadri Educational Institutions provides the students an introduction to the culture of doing research and so many students are taking advantage of college journal to publish their scholarly articles. In this issue Ms. Andrea Divya D'Cunha and Ms. Thripty have explained the evolution of medical tourism as an industry, India advantage and Kerala's contribution. Mr. Lanvil Daril D'Souza in his article "Foreign Direct Investment" has described the flow of FDI in India as well as in the whole world. He examined recent trends in FDI and the States and sectors which attracted FDI in India. Ms. Sahsha Rai has explained the principle working behind the building implosion technique which is used to demolish large structures with minimum damage to its immediate surroundings in her article on "Building Implosion" and Mr. Shobhan Kumar has explained the importance of Automatic Plant Irrigation System in his article "Mobile Irrigation".

---

## Medical Tourism in India- A Conceptual Study

---



**Andrea Divya D'Cunha**  
III Sem MBA  
Email: Andrea.mba11@sahyadri.edu.in



**Thripty**  
III Sem MBA  
Email: Thripty.mba11@sahyadri.edu.in

**Abstract** - Medical tourism is a term initially coined by travel agencies and the mass media to describe the rapidly-growing practice of travelling across international borders to obtain health care. In this article a conceptual framework is constructed to show how globalization, market economy and technological innovations have changed global health markets to create a space for the expansion of medical tourism. It also illustrates how increasing health care costs, long waiting periods in the developed world, low wage, competitive health markets, availability of low cost transportation, and access to advanced information technologies have created opportunity to expand medical tourism in many developing countries. The paper also identifies the various opportunities and challenges that one has to face in medical tourism and highlights as to why Kerala has become a favourite spot for medical tourism.

**Use this link to access the full text -**

[http://sahyadri.edu.in/e-journal/medical\\_tourism.pdf](http://sahyadri.edu.in/e-journal/medical_tourism.pdf)

---

## Foreign Direct Investment

---



**Lanwil Daril D'Souza**  
III Sem MBA  
Email: Lanwil.mba11@sahyadri.edu.in

**Abstract** - Foreign direct investment (FDI) is direct investment by a company in production located in another country either by buying a company in the country or by expanding operations of an existing business in the country. A greater FDI flow into country shows the investor friendly conditions of the country and largely reflect the growth potential of the nation. The main reason why the country requires FDI is the scarcity of capital or technology in the host and availability of those in other country. Today's globalized world is becoming more open and friendly to FDI. The reason of this study is to find the flow of FDI in India as well as whole world. The study shows the scenario in recent history throughout world. The Major cities in India which were benefitted from FDI and the reasons for it are also taken note of. The main sectors which attracted FDI in India also have been mentioned with

**Use this link to access the full text -**

<http://sahyadri.edu.in/e-journal/foreigndirect.pdf>

---

## Building Implosion

---

**Sasha Rai**

VII SEM, Dept of Civil Engineering  
Email: sashar044.cv09@sahyadri.edu.in

**Abstract** - Building implosion is the strategic placing of explosive materials and timing of its detonation so that a structure collapses on itself in a matter of seconds, minimizing the physical damage to its immediate surroundings. Despite its terminology, building implosion also includes the controlled demolition of other structures, such as bridges, smokestacks, towers, and tunnels. A true implosion usually involves a difference between internal (lower) and external (higher) pressure, or inward and outward forces, that is so large that the structure collapses inward into itself. In contrast, building implosion techniques do not rely on the difference between internal and external pressure to collapse a structure. Instead, the technique weakens or removes critical supports so that the building can no longer withstand the force of gravity and falls under its own weight. Implosion is a violent bursting inward that allows the sequential elimination of structure supports. Enough explosives are used to eliminate the critical vertical structural supports. The placement of the charges and the sequential detonation timing is of vital importance, allowing the collapse of the building induced by the weight of the structure. Implosion demolition methods are used in urban areas and often involve large structures.

**Use this link to access the full text -**

<http://sahyadri.edu.in/e-journal/implosion.pdf>

---

## Mobile Irrigation

---

**Shobhan Kumar**  
**Asst Professor**

Department of CSE  
Email: shobhan.cs@sahyadri.edu.in

**Abstract** - In the field of agriculture, use of proper method of irrigation is important because the main reason is the lack of rains & scarcity of land reservoir water. The continuous extraction of water from earth is reducing the water level due to which lot of land is coming slowly in the zones of un-irrigated land. Another very important reason of this is due to unplanned use of water due to which a significant amount of water goes waste. For this purpose; we use this automatic plant irrigation system called MOBILE IRRIGATION.

**Use this link to access the full text -**

[http://sahyadri.edu.in/e-journal/Mobil\\_irrigation.pdf](http://sahyadri.edu.in/e-journal/Mobil_irrigation.pdf)

---

# Commentary

## DIGITAL JEWELLERY

Digital jewellery is the next generation of communication with fashion. It is nothing but dividing a communication device into parts and embedding them into jewelry. This concept is known as "Digital jewellery". By the end of the decade we could be wearing computers instead of sitting in front of them.

as a normal cellular phone. The various components that are inside cell phones such as Microphone, Receiver, display, touch pad, circuit board, antenna are embedded into different jewelry parts according to their working. IBM has developed a prototypes of cell phone that consists of several pieces of digital jewelry that will work together.

Here are the pieces of computerized-jewellery phone and their functions.

- Earrings - Speakers embedded into these earrings will be the phone's receiver.
- Necklace - Users will talk into the necklace's embedded microphone.



### •What is Digital jewellery?

Digital jewellery is the fashion jewellery with embedded intelligence. "Digital jewelry" can help you solve problems like forgotten passwords and security badges. "Digital jewellery" is a nascent catchphrase for wearable ID devices that contain personal information like passwords, identification, and account information. They have the potential to be all-in-one replacements for your driver's license, key chain, business cards, credit cards, health insurance card, corporate security badge, and loose cash. They can also solve a common dilemma of today's wired world – the forgotten password.

### •Digital jewellery Components

Each piece of jewelry contains a part of cell phone embedded in them, together works

• Ring - Perhaps the most interesting piece of the phone, this "magic decoder ring" is equipped with light-emitting diodes (LEDs) that flash to indicate an incoming call. It can also be programmed to flash different colors to identify a particular caller or indicate the importance of a call.

•Bracelet -Equipped with a video graphics array (VGA) display, this wrist display could also be used as a caller identifier that flashes the name and phone number of the caller.



Jackline Sharol

VII Sem, Dept of ISE

Email:jackli007.is09@sahyadri.edu.in

Source : Internet

# Commentary

## SKINPUT

Touchscreens are very popular nowadays in both science fiction as well as real life. It's an electronic visual display that can detect the presence and the location of your touch. This term generally refers to touching the display of the device with a finger or hand. Skinput is a technology in which your skin can become a touch screen device or your fingers as buttons on an mp3 controller.

the biceps. It has ability to operate even while on the move, say, changing tracks on the mp3 while out jogging, answering a phone call or starting a stop watch. Not to mention that the possibility of using your hand as calculator means you really can count on your fingers.



This is a wonderful approach where one can use human body as input device. This technology provides always available, naturally portable system. An innovation called skinput suggests the true interface of the future might be us.

Microsoft and Carnegie Mellon university unveiled this technology, which shows how it can turn your body into a touch screen interface. Skinput is a technique where it “listens” to the vibrations happening in your body when tapped. Tapping on different parts of your arm creates different kinds of vibrations depending on the amount and shape of bones, tendons and muscle in the specific area. Skinput uses a series of sensors to track where the user taps on his arm. These sensors can track those vibrations using an armband and understand where the user tapped.

Skinput has been publicly demonstrated as an armband, which sits on



Rakshitha kiran p  
 VI Sem, Dept of CSE  
 Email: rakshi066.cs09@sahyadri.edu.in

# Insights of Workshops/ Seminars/Conferences

## Mechatronics & its Application



Dr.Devdas Shetty in his workshop on 'Mechatronics & its Application', described the nature and scope of Mechatronic System. He explained in detail the key elements and components of Mechatronic System. Dr. Devdas Shetty briefed about his research work which has made original contribution to the understanding of engineering surface measurement, intellectual advancement in Mechatronics. He beautifully illustrated the application of Mechatronic system in various fields viz., Automotive Industry, Aerospace Industry, Consumer Industry, Industrial Systems & Products, Manufacturing, Health Care Industry etc.,

During the interactive session with the students of Mechanical Engineering, he brought out the clear differences between Mechatronics & Robotics. He also identified and discussed potential and thrust areas of research in the field of Mechatronics and Product Design which could be undertaken by the faculty members in partnerships with industries. He inspired and gave valuable guidance for different startup projects which could be undertaken by the students of Mechanical Engineering. His workshop updated and enriched the knowledge of faculty members and students on Mechatronics and Product Design.



Speaker : Prof.Devdas Shetty Ph.D, PE

- Dean of Research and Professor of Mechanical Engineering at the University of Hartford. USA.
- Dr. Devdas Shetty is the author of three books and more than 200 scientific articles and six patents.
- He is well known for his contributions in establishing partnerships between university and industries
- Dr. Devdas Shetty is associated with the U.S. Army research project on Unmanned Aerial Vehicles.
- In partnership with Albert Einstein College of Medicine in New York, he invented the patented mechatronics process for supporting patients.



# Guidelines for Submitting Articles

Research Minds is devoted to the publication of original research work undertaken at the Sahyadri College of Engineering & Management, Adyar, Mangalore. The contents of this E-Journal pertain to research contributions in all areas where active research work is pursued in the Institute. Authors of articles published in this bulletin, retain the right to publish the contents of the same in other research forums including web-based publications, journals and periodicals.

The E-Journal welcomes the submission of manuscripts that meet the general criteria of significance and excellence. Papers will be published approximately one month after acceptance. All articles published in the SAHYADRI E-Journal will be peer-reviewed.

## The following categories of articles are accepted for publication

### Research Articles

E-journal welcomes original research papers in various areas of Engineering and Technology Management, Health Science, Basic Sciences etc.

- Articles must be no more than 8,000 words, including notes and references. Longer articles will not be processed.
- The Articles should be sent by email.
- Articles should be accompanied by an abstract of a maximum of 200-250 words.
- Authors are requested to follow Sahyadri E journal's manuscript format while preparing their articles. The manuscript format and example file is posted on
  - <http://www.sahyadri.edu.in/e-journal/manuscript%20template.doc>
  - <http://www.sahyadri.edu.in/e-journal/example.pdf>

### Commentary

E-journal invites short contributions to the 'Commentary' section on the latest advancements in Science and Technology, Engineering and Management so that our readers can be up-to-date with the current developments in this competitive world.

### Insights of Workshops/Seminars/Conferences

E-journal invites Insights of Workshops/Seminars/Conferences conducted and attended by students and faculty.

### Book Reviews

With the objective of promoting reading habits among students and faculty, this E-Journal will publish book reviews.

### Research Notes

Students, M.Phil and Ph.D. scholars are encouraged to send their comments and initial products of their research for the Notes Section. Articles should be no more than 3,000-4,000 words.

### Research Abstracts

E-Journal invites Abstracts of Project work, M.Phil. and PhD works. Abstracts should be no more than 2,000-3000 words.

### Discussion

E-Journal encourages readers to comment on articles published in the E-Journal. Submission should be 1000-1500 words

### Letters

Readers of E-Journal are encouraged to comment (300-400 words) on published articles to the Letters column.

### General Guidelines

- Writers are requested to provide full details for correspondence: postal address, phone numbers and email address.  
(The email address of writers will be published along with the article).
- Authors are requested to prepare their soft copy version in text formats and not in PDF version
- Writers are requested to follow the manuscript template specified and go through the template and example file before writing their paper.

---

## Contact

Editor

**Dr. K. Vidyavathi**

editorjournal@sahyadri.edu.in

M.: 94488 50976

Co-Editor

**Sunil Kumar S.**

coeditorjournal@sahyadri.edu.in

M.: 94821 24256

### SAHYADRI E-JOURNAL

Sahyadri College of Engineering & Management

Adyar, Mangalore - 575007, Karnataka, India

Ph.: 0824 2277444

Email: journal@sahyadri.edu.in, web: sahyadri.edu.in