

Mechanical Aspire

Achievements in Sports, Projects, Industry, Research and Education

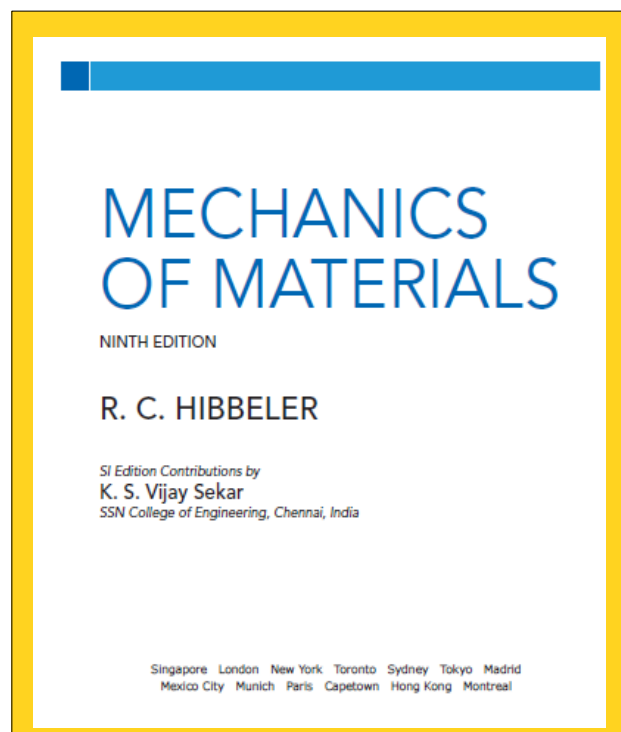
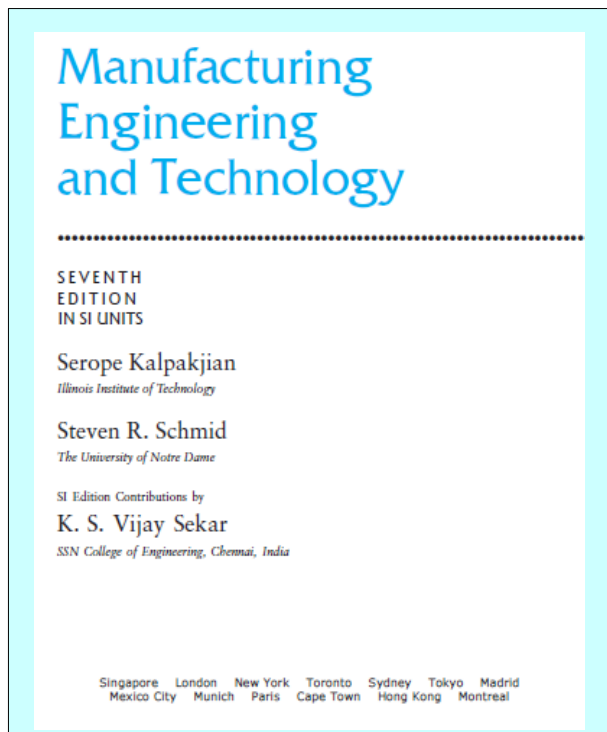
Supporting International book's entry into Asia



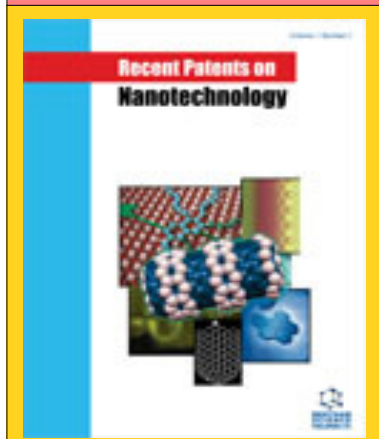
Dr.K.S.Vijaysekar, an ardent writer makes his first plunge into Engineering Books. Listen to his experiences.....

I am happy to share with you the title pages of the 2 books I worked on for Pearson's publications, Singapore. The 2 books - Manufacturing Engineering and Technology by Kalpakjian & Schmid and Mechanics of Materials by RC Hibbeler are best sellers across the globe. The authors are authorities on the subject.

I had the privilege of working with the Pearson group based in Singapore who contacted me sometime in November 2012 for these two books. I had reviewed one of their earlier publications a few years back and they were impressed with the review and came calling for these assignments. They are very happy with the work done which is primarily an adaptation of the US editions for Asia - Pacific markets, which means complete translation of the 2 texts including problems, figures, solutions, ppt slides from Imperial to SI units.



External Recognition- Invitations for review



Dr.A.K.Lakshminarayanan reviewed two research papers for Materials Science and Engineering A, Elsevier publications and 4 papers for Materials and Manufacturing Processes, Taylor and Francis publication in the area of Materials Processing and Joining



VeA invited to review a paper for the journal "Recent patents in nanotechnology".



Dr. B. Anand Ronald, Assoc. Prof, was invited to review a book on "PNEUMATICS" by Universities Press

Invited Lectures



The Event: AICTE Sponsored Faculty Development Program on "Renewable Energy based Cooling Systems - Opportunities & Challenges" at St. Joseph's College of Engineering, Chennai 600 119, between Nov 18-29, 2013.

Dr.M.Suresh delivered an invited lecture on "Theoretical and experimental studies on R134a/DMF based vapour absorption refrigeration system" on Nov 25, 2013



Dr. N. Lakshmi Narasimhan delivered an invited lecture on "Renewable Energy Sources - Overview and Challenges Ahead" on Nov 18, 2013

Campus Update



Miss.Lekshmi Prasad, student Counselor resigns, and was relieved on 30th November 2013.

She joins her family at Trivandrum and is awaiting her marriage fixed for feb 2014. Wishing her well.

Info to Alumni

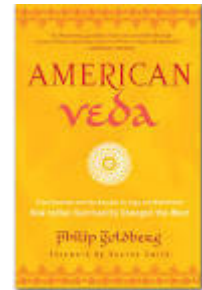


On Nov 18, there was an interesting lecture on American Vedha by Mr.Philip Goldberg . Excerpts from his popular book..

In February, 1968, the Beatles went to India for an extended stay with their new guru, Maharishi Mahesh Yogi. It may have been the most momentous spiritual retreat since Jesus spent those forty days in the wilderness.

With these words, Philip Goldberg begins his monumental work, a fascinating look at India's remarkable impact on Western culture. This eye-opening popular history shows how the ancient philosophy of Vedanta and the mind-body methods of Yoga have profoundly affected the worldview of millions and radically altered the religious landscape.

Read more at http://americanveda.com/?page_id=17



Department Update

The dept bid Farewell to Dr.Elangovan K on Nov 4, 2013. He joins a Govt college at Oman as Head of Section.



Dr.S.Somasundaram joins as Associate Professor. He is a Ph.D. From IIT Madras, specialising in Combustion. He has two International Journal papers to his credit.



Faculty News



Faculty Research Progress



Dr.R.Prakash

3 Faculty received their Doctoral Degrees



Dr.A.S.Ramana



Dr.M.Nalla Mohammed

Research Support

Dr. B. Anand Ronald, Assoc. Prof. attended a DC confirmation meeting @ Velammal Engg. College (19thNov)

Industry Visit



Dr. N. Lakshmi Narasimhan visited three companies SANMAR, TANFAC and ARKEMA chemical factories at Cuddalore arranged through PALS-IIT. (8thNov).



Dr. N. Lakshmi Narasimhan, Assoc. Prof. and Mrs. R. Rajeswari, Asst. Prof., visited Saint Gobain Glass Industries Ltd - Visit organized by IITM – PALS (14thNov)

Training

Dr.Vijay Sekar KS, organized a one day training on EdgeCAM software on 7thNov and another one day training on Assembly modelling in CATIA V6 software on 8thNov.

Both were attended by Mr.Vimal Sam Singh, AP, Mech and Mr.Giridharan, Tech.Asst, CAD Lab.



SSN Trust Sanctions Faculty Projects

Dr.S.Vijayan's Research Project titled " Evaluation of Microstructure and Mechanical properties of dissimilar FSW on Magnesium Alloy" was approved by SSN Trust,Fund Allotted – Rs.4 Lakhs



Dr. A. S. Ramana's Research Project titled "Experimental Investigation on PCM Integrated Solar Drier" was approved by SSN Trust, Fund Allotted - Rs. 2.5 Lakhs

Project Efforts

Dr.V.E.Annamalai has submitted the following proposals:

- 1.Design and Fabrication Lab for Experiential Learning, under MODROBS of AICTE, requesting a funding of Rs. 20 Lakhs.
- 2.State Level Student Project Exhibition in Engineering & Technology- under the Innovation Promotion Scheme of AICTE, requesting a funding of Rs. 5 Lakhs.

Info from Alumni

Alumni Feedback 1-Sarah Ann Ramji

Sarah is now doing her M.S. at
University of Toronto
Institute for Aerospace Studies



Sarah Ann Ramji to Dr.N.LakshmiNarasimhan

Hello Sir,

How are you? I wanted to thank you for all the help with the final year project and the IIT internship, because without that I would not have been able to manage my research work here. If you are interested, my lab's page and my research is mentioned on this website : <http://arrow.utias.utoronto.ca/~steinberg/people.html>

Basically what I am doing is looking at the flow in a high turbulent flame and tracking the evolution of the Lagrangian particles. I find the work challenging, but interesting! Also, there are a couple of scholarship applications that are coming up and my supervisor here likes the recommendation letters I sent with my application and suggested I give the same recommendations for scholarships as well. Thank you so much.

I did have a couple of suggestions which I feel might help your current students who wish to go abroad and study.

One of the things I find is that in some ways we did things very differently in India that is expected here, so if students could prepare for that ahead it would help. One of the things is using LaTeX to write papers and thesis, which is convenient for editing and formatting, but takes a bit of time to get used to. Some people insist that documents are written only in LaTeX so if it is possible try to get students to use it as soon as possible (This may be just a North American thing but I think it's useful).

Another suggestion is to maybe ask SSN to purchase a license for Refworks and get students to use that, because it saves a lot of trouble especially when it comes to changing format of references, since it does it automatically.

Also, I know this is a point you have iterated again and again but please ask everyone to learn Matlab and practice using it in all its capabilities. I have to thank you for asking us to use Matlab for our project because that has helped me a lot.

These suggestions are from my side, just as ways people from SSN could better transit to a university abroad. Also, if anyone wants to apply to University of Toronto and want help, do refer them to me. Canada has a great working and research environment and I think more people should consider this option.

Thank you once again for the help you gave me during my undergrad since that has played a big role in how I work today.

Regards
Sarah.

Alumni Feedback 2-Tarun.M

Subject: Greetings from Stockholm - Tarun
To: lakshminarasimhann@ssn.edu.in



Dear Sir,

Its been three long months since I started my masters here at KTH Royal Institute of Technology in this beautiful city of Stockholm. Frankly, Its been one really hard journey getting used to this new city and the challenging new educational system, where real life problems are assignments to be solved from scratch with minimum inputs.

Talking about assignments, I would want to thank you for introducing me to [MATLAB](#), which I used while doing my final year project under you, MATLAB is one tool that is extensively used here irrespective of the course or field or even level of education. Even bachelor students here are well versed with matlab and it is one software that I feel must be highly recommended to my juniors at SSN.

Secondly, I was fortunate enough to make it in to the SAE Formula student here, again thanks to the SAE club back in SSN and the initiative to participate in [SAE Baja](#) for the first time, I came to know that my juniors have made it to the Final round of the Formula SAE competition and I wish them all the best and hope they receive all the support from our department and university .

About my experiences in a new country , I would say that it was quite a struggle initially to settle down, translating every single word at the grocery shop, adjusting to the cold weather, and the first experiences of wearing winter clothes, being from Chennai even that was a first.

My exams for the first period at KTH just got over, and these three months was a hectic period, where I had to solve practical problems in the form of assignments which required a lot of extra effort .Moreover working in a multicultural group, I was able to learn a lot from different people and how they go about doing their work, One of my assignment groups had an Italian and a Chinese, and I must say working with them was a very good experience, they never give up until they understand the easiest of basics, and they are really committed and hard working. I also had the opportunity to work with Swedes, Germans, French and I would say each of them have their own way of working and there is a lot to learn from each one of them. I just hope I get to improve myself working with them .

Now, I am starting my second period and this is the time I need to start worrying about the weather more than my courses, As they say, Winter is coming , and In this part of the world so is darkness, with the sun rising at 8.30 am and setting around 4 PM , its going to be really long nights. [The December month is the festive month here in Stockholm, starting with the Noble Prize week, which I am looking forward to , mainly to hear the Noble Laureates speak during the Noble lectures, which is open to all and followed by Christmas and New year.](#)

On the whole its been an awesome experience, and I am looking forward to hearing from you .Thanks,

Tarun,

Msc Engineering Design - Machine Design, KTH Royal Institute of Technology, Stockholm

Alumni Feedback 3- SatyanarayanaRao

Greetings to all !!!

Hope the mechanical department is doing great, as always. Firstly, I would like to congratulate all the students who have got placed till now. I have joined as a GET(Graduate Engineer trainee) at RANE group, and I am going to tell you about my experiences in work. My role in RANE is that of an SAP consultant. For those of you who do not know what SAP is, it is an ERP (Enterprise Resource Planning) software that integrates all aspects/modules of a business . Yes, and even I did not know what SAP was, until I joined work.



SatyanarayanaRao was the best outgoing student of SSNCE last year. He is now in Rane.....

After I got placed in RANE through the campus, I got a call from RANE whether I would like to join them as an SAP consultant, which is a software (computer related) job. I asked them to give me a day to respond, and I asked some of my friends/ relatives whether it would be a good idea to join , as I am from a mechanical engineering background. All of them had this to say : “ You would be a fool if you do not join for this role” .After this, I called the company and gave them a positive reply.

Only after joining there did I notice how good it was, and noticed the importance of SAP. With good mentors, I was able to learn the core concepts in SAP faster than I thought. The work is great over here, and I love the work, as it is a great learning experience for me. Another good thing about SAP is that, it is not a software job alone. It requires you to think logically, and provide solutions. It is not about sitting in front of a computer and doing monotonous work. Something new comes up everyday, and knowing the software is just a secondary benefit.

What is required is knowledge of the business processes of an organization. Therefore, this role forces you to know the business processes of an organization in depth, and also enhances your communication skills as you need to interact with all the departments to be an effective SAP consultant. Another good thing about the company is that there were various training programmes given to the GETs , which actually helps in easy transition into the corporate world.

Students may find it hard at first to start working in companies, naturally because of long working hours, and difficulty in gelling in with others who have been working there for so long. But, as days go by, the transition will be smooth.

So, whichever company you guys join, whatever role you are allocated to, you can rest assured that there will be people to guide you throughout and make you comfortable. The first few months or years are a valuable learning experience for everyone. So it is important to stay cool, love the job while mastering it, and after that, the sky is the limit.

Alumni Funds student projects

Vigneswaran Govindarajan, alumni of 2007-11 first batch, went to Germany for his M.S. And is now interning at Japan Steel Company at Japan. He, alongwith like minded colleagues, has started a research initiative called Concentric Research Foundation (CRF). Through CRF, he is proposing to support six student projects at SSNCE, covering all departments, to the tune of Rs.15,000 per project, every year. He is interested in Product based project ideas only. An MoU has been signed to this effect and the modalities of the funding are being worked out. [We appreciate this gesture.](#)



Industry visiting SSNCE

On the Placement Front....



On 28th Nov, Mr. A. P. Sridhar, Vice President-HR and Mr. K. Ramesh, Divisional Manager - Engg. and R&D of TEL visited us. Mr. Sridhar said that his assessment about the campus and department would be placed before the top management of the company to consider SSN for campus recruitment along with other recognized institutes by Turbo Energy. We hope to add TEL to our list of recruiters in 2014.

TEL has set up a fully automated assembly plant at Paiyanoor about 50 kms from Chennai. TEL also has a full fledged R&D facility at the site, recognized by the Department of Science & Technology (Govt. of India) since 1985. TEL is accredited to TS 16949:2002 & ISO 14001:2007 standards. Their Green Building concept is amazing-and has been certified under 'PLATINUM' category by LEED USGBC (United States Green Building Council)

Learn the amazing facts about TEL Green Building at the following link.

<http://www.turboenergy.co.in/csr/green-initiatives.html>

Industry News



Pranav Prakash of Final Year writes...

It has been over a year since Ezhil, Mukesh and I visited the joint-venture establishment by Renault and Nissan Motors here in Chennai but it requires a certain amount of prudence in the theory behind TQM practices to completely appreciate the efforts and attention to detail that companies have to focus on, in order to implement tools and techniques that put them on par with the highest standards of quality and safety in the world.

In 2010, RNAIPL was awarded both the ISO Quality certification (ISO 9001) and ISO Environment Management System certification (ISO 14001). In early 2009, they decided to take up the challenge of training internal auditors and educating its entire workforce, including suppliers and contractors on ISO awareness. And in an amazingly short period of a little over 12 months, RNAIPL, after holding three internal audits, was able to successfully clear the audits by certification body auditors in July 2010.

The Confederation of Indian Industries (CII) even awarded RNAIPL for being one of the safest and most environment friendly factories in the country. Kaizen and 5S practices were rife in every nook and corner of the buildings. The Japanese contribution in terms of highly disciplined and extremely efficient practices combined with the French's finesse in design and aesthetics make Renault-Nissan a force to be reckoned with.


In fact, Renault is working on a car codenamed 'A-entry' as we speak, in order to take on the likes of the Maruti Alto and the Hyundai Eon, both of which dominate their class in the Indian markets. It's expected to hit the roads by late 2014. And if Renault-Nissan's present form is anything to go by, both Maruti and Hyundai better be prepared to face the challenge head on or simply watch in awe as they pass by, much like anyone who's seen the latest Volvo commercial for Dynamic Steering. Here's the link for those who haven't

<http://www.youtube.com/watch?v=j-b1q-Ea9E8>

Forthcoming Events

The 2014 Int'l conference on Advances in Materials Research (ICAM14) is one of the participating conferences which will be held in association with the Advances in Materials Research, An Int'l journal. The conference will be held during **24-29 August, 2014**

Submission of abstracts-March 31,2014 <http://acem.cti3.com/acem14.htm>



SRI RAMAKRISHNA ENGINEERING COLLEGE
Autonomous Institution, ISO 9001-2008 Certified, Approved by AICTE and
Affiliated to Anna University, Chennai, All eligible courses Accredited by NBA
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DEPARTMENT OF NANOTECHNOLOGY
Organizes

WINTER INTERNSHIP PROGRAM ON NANOTECHNOLOGY
December, 9 – 13, 2013

- Training on Nanomaterials synthesis
- Laboratory experimentations in the Advanced Materials Synthesis Laboratory
- Basic training on Characterization tools namely XRD, SPM, DLS, UV-VIS and FTIR
- Characterization of the synthesized nanomaterials by the attendees

Registration Fee Rs.2000

Innovation Challenge 1

The Danfoss 2013-14 Project Award is an intercollegiate competition designed for Final year students in Under Graduate (UG) Post Graduate (PG) courses, who have an interest in 'creating futuristic solutions' that are important/impactful to Danfoss business in the area of Climate and Energy.

Danfoss focus areas

Power Electronics/Refrigeration

Climate Controls/ Heating Solutions



Prize for UG

1st place - cash prize of Rs.75000/-*

2nd place – cash prize of Rs.50000/-*

Prize for PG

1st place - cash prize of Rs. 100000/-*

2nd place – cash prize of Rs. 75000/-*

* Taxes as applicable

Details at dept office and at <http://www.danfoss.com/India/Danfoss+Project+Award.htm>

Innovation Challenge 2

Jed-i stands for the Joy of Engineering, Design, and Innovation. The Jed-i project challenge is an annual event designed to identify and showcase the best final year engineering project.

The challenge is open to students from all branches from all engineering colleges across India. The branches will be grouped into three [divisions](#) for evaluation: Computing, Electrical, and Mechanical.

Prizes

Overall winner of the Jed-i National Challenge:
Rs 1.5 Lakhs.

First prize for each of the three division:
Rs 75,000 each.

Each division has a runner-up (Rs 40,000) and a special mention may be awarded at the jury's discretion (Rs 20,000).



Details at <http://jed-i.in/challenge/>

Important Dates	
Early registration closes on:	15th Dec 2013
Registration and Project Abstract:	01st Feb 2014
Extended Project Status:	02nd Apr 2014
Finalists Notification:	01st May 2014
Project Challenge Finals:	June 2014
Award Ceremony:	June 2014

Slogan Contest

The “Be There with Hyundai Contest” gives **FIFA.com** Club members the chance to flex their creative muscles, celebrate their national team and win prizes!



Show your support for your 2014 FIFA World Cup™ team by creating the perfect slogan. You can submit one slogan per team for as many teams as you like. Winning submissions will be painted on the official team bus for each of the 32 countries competing in the 2014 FIFA World Cup Brazil™!

Submit your slogan before the 27/2/2014 deadline!

<http://www.fifa.com/worldcup/be-there-with-hyundai/overview.html>

Amazing Products developed.....1

Few medical instruments evoke the stomach-churning dread that needles do, especially when finding the vein takes multiple stabs. But thanks to a new wearable trans-dermal imaging system from Evena Medical, even neophyte nurses will be able to tap your veins without turning your arms into pin cushions.

The Eyes-On Glasses System combines Evena's own proprietary multi-spectral 3D imaging technology with Epson's Moverio smart glasses—a set of commercially-available binocular HD spectacles—to provide medical practitioners an anatomically-accurate, real-time view "through" the patient's flesh to the underlying vascular structure.



The glasses can be worn over existing eyewear, and incorporate "multi-spectral 3D imaging" (multiple spectra of projected light) to make veins show up when viewed via the glasses' dual cameras. Users see the patient's skin as it really is through the glasses' clear lens, but with an image of the veins as processed by the cameras overlaid on top.

Look at the blood flowing through the veins..and how easy would that be for nurses...at

http://www.youtube.com/watch?feature=player_embedded&v=3ljagQmeh08

Amazing Products developed.....2

Have you ever thought of a three wheeled scooter with two front wheels?....Read on..

The [Piaggio MP3](#) is a different beast altogether. It's a 250cc single-cylinder, injected CVT scooter with a top speed over 110kmh and two independently suspended, tilting front wheels.

The magic of the twin front wheel system becomes instantly apparent once you start driving. With twice the normal amount of rubber on the road, the traction is just enormous - and the wider front footprint gives a feeling of supreme stability. It just doesn't matter what you throw at the little MP3 in a turn, that amazing front end just deals with it. Be it ruts, potholes and corrugations at good speeds or serious centrestand-scraping lean angles , the front wheel runs over them simply tracked through with the slightest of bumps.



Until you experience it, you wouldn't imagine what a feeling of confidence this gives you - you can stuff this little scoot into tight turns on wet, poorly surfaced roads much quicker than your average roadbike. And the slow-speed handling is another revelation.

And if this makes you overconfident, and you find yourself running way hot into a corner, never mind, just jump on the brakes! The twin front wheels mean you can ignore the golden rule of motorcycling and grab the front brake even at full lean. If you're really brutal you can make it slide a bit, but in most cases it just pulls the bike up, quickly, safely and very, very fast

Catch the fun at <http://thekneeslider.com/piaggio-mp3-400-3-wheel-scooter/>



Enjoy reading **Life between 22 Yards for 24 years-a Tribute to Sachin** at KSV's blog

<http://vijay-sekar.blogspot.in/2013/11/life-between-22-years-for-24-years.html>