



ASM International, Pune Chapter Chapter News Letter

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February 2012

EDITORIAL...✍



It's my pleasure to bring the fourth issue of Chapter News letter for the year 2011-12. This issue will be released at the hands of Prof Chris Berndt, President ASM International USA, during his visit to Pune Chapter on 10th Feb 2012. This is the first time when President of ASM international will be visiting Pune Chapter. His complete program has already been published in previous news letter.

Our young enthusiastic Student member Priyanka Chinchorkar had interviewed Prof Chris Berndt, President ASM International. His interview will let you know about his vision & mission as President ASM international. Chris also talked in details about his plan for expansion of ASM activities in India and how he foresees ASM as Number One.

We all are aware that Origami is an ancient Japanese art of paper folding for fun. Today Origami is an advanced fine art rather than a simple paper craft. The complex structures and models that are being built using basic origami techniques often use high level of mathematics. It is a combination of the faculty of art, science, engineering and architecture. A public sculpture of origami displayed in the outdoors, requires material that can sustain rain, dust, sunshine and climatic changes. Technical Article Origami with Colour Coated Ultrathin Foils of Stainless Steel by Dr Kanyakumari Dutta will give insight of this art, science, engineering and architecture.

In this issue, we are introducing our members Nitin Joshi, Shirish Nagarkar, Anshuman Ganeriwala, Subhashish Banerjee.

Photo gallery will give glimpses of technical presentation by Prof David Matlock.

You are the prime focus of this news letter. Your views & opinions matters much to make this news letter more meaningful & resourceful. We are looking forward for your suggestions to achieve the purpose of news letter & make this news letter more participative. Please send us technical articles, your profile for inclusion in News Letter. Please feel free to write to me at

Udayan.Pathak@tatamotors.com

or to Mr Louis Vaz, Chairman, News Letter Committee at

loufvaz@hotmail.com

WE MOVED TO NEW PREMISES

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"TEAM ASM WILL WIN" - CHRIS BERNDT

Prof Christopher Berndt, President ASM International is on his maiden visit to Pune Chapter. Taking this opportunity our Young Student Member Priyanka Chinchorkar had interviewed him, for Chapter news letter. Following are excerpts.

Q: Can you throw some light on your vision for ASM?-

A: If I were asked to encapsulate my entire Vision for ASM in a brief statement, I would say the following: **"ASM: One, #1, First & ONLY"**.

Q: How do you plan to explain this vision?-

A: The first point is – **"One ASM"**: Staff, Volunteers and Members working together on a shared vision and outcomes. In other words "It is the Team that wins .. Team ASM will win!" The second point is – **"ASM #1"** The resource for all, high-pedigreed information that relates to materials. In other words "If it comes from ASM then it can be trusted." ASM will work with other professional societies, government organizations, and clients to deliver relevant materials information products and services. The third point is – **"ASM first"** ... for networking, professional development and career advancement. In other words ASM helps members and sustaining member companies be informed and create success for their livelihoods. This conference, the net-working social sessions, local chapter meetings and other activities are examples of what ASM can do to help you. The fourth and final point is – **"ASM ONLY"** .. a single resource for individuals and Customer Focus Groups who need to find solutions. This point is a summary of the above 3 deliverables and represents (in one acronym and one word!) the take-home message. Again, with due respect and recognition to the many professional societies around the globe; please remember the context of this message; that is "ASM must actively choose what we choose to be best at!"

Q: What is the key to this vision?-

A: ASM's strategic planning activities have generated a long list of ideas for products and services which could be developed, but in a time of finite resources, it is necessary to prioritize and focus, so ASM's resources, of which society volunteers are perhaps the most important component, are deployed wisely to realize near- and medium-term SMART (specific, measurable, achievable, relevant and time-bound) objectives.

Q: Can you explain us your personal mantra "Focus-Focus-Focus"?

A: "Focus – Focus – Focus" is part of my personal mantra. When you see me next time don't say "hello Chris" .. just say the word "FOCUS" and by saying that we will have both recognized that we are part of ASM and that ASM must focus resources on winners and that we must carefully choose the future winners.

Q: What is the value proposition ASM has for its members and industry as a whole?-

A: ASM has a defined Value Proposition. Stated in short form it is ... ASM is where materials users, producers, and manufacturers converge to do business.

Q: What are your plans for partnering with organizations with the goals lying with ASM?-

A: There six groups are:

- Colleges & Universities
- Government
- Industry
- Internationalism
- Partnerships
- Volunteerism

The term that we have adopted is "Customer Focus Groups. Each of the Customer Focus Groups incorporates a Value Delivery System that folds into ASM's business plan.

Q: What are the critical issues ASM is currently facing?-

A: Content is Everything, Emerging Technologies, Life Long Learning and Education, Volunteerism are the critical issues ASM is facing.

Q: What do you think are the foundation stones of ASM?-

A: The two Foundation stones of ASM are (i) an excellent Committee Structure, and (ii) a rigorous Value Proposition statement; both of which serve the needs and expectations of the members.

Q: How have the bio-materials helped in the modern orthopedics sector?-

A: A primary goal in modern orthopaedics is increasing the rate and long-lasting anchoring of implants in the human body. Hydroxyapatite, having a chemical structure and chemistry that is identical to bone, significantly enhances the ongrowth and subsequent



Priyanka Chinchorkar is Student Member of Pune Chapter. She attended Materials Camp organised by ASM International Pune Chapter in Summer 2009. At present she is students of First Year Engineering at Marathwada Mitra Mandal's Engineering College, Pune. She wants to be an active volunteer of ASM Pune Chapter.



ingrowth of natural bone material. Additional development of this model will enable the development of coatings that exhibit appropriate microstructures for long-term stability of coated orthopaedic and dental implants.

Q: Do you have any activities planned to train and create future ASM leaders?

A: Every year ASM International Organize Leadership Days around August. This is three days camp to train officers & upcoming leaders of ASM. Chapters & Head Quarter support members financially to attend the Leadership Days. To ensure that every chapter takes advantage of this training, we have made it mandatory that every alternate year chapter must send at least one officer / upcoming leader to attend these Leadership Days. During these leadership days we familiarize participants about ASM, Vision & Mission of ASM, Support offered by ASM HQ, Website, Challenges and how few chapters have addressed these challenges, Success stories of various Chapters & how Chapter activities can be taken further etc etc. At present every alternate year the Leadership Days are held at Cleveland and alternate year it is organised at some Chapter location in US. ASM Staff, Candace Cunningham, Kelly Sukol remain present all the days at Leadership Days site. There is also thought that India National Council should organize such leadership days in India for Leadership Development in India & Asia Pacific Region. Let us see how it works out.

Priyanka: Your words have inspired all of us. Thank you very much for your precious time.

Are your contacts updated?

Make sure your contacts (Email, Telephone & Postal Address) are updated on ASM Website. You will receive lot of updates, information, discount details, new publication notices etc from ASM International as well as Pune Chapter.

Difficulty in updating? Contact - Laxman Deshpande, Chairman, Membership Development Committee, Pune Chapter l.d.deshpande@gmail.com or Candace Cunningham, ASM Head Quarter candace.cunningham@asminternational.org for support.



Anshuman Ganeriwala,

Senior Manager- Heat Treatment at TML Drivelines, Jamshedpur

(A 100% Subsidiary of Tata Motors Ltd.), is Individual Member of ASM International Pune Chapter since last one year. He joined TML Drivelines in 2007 as Manager (Quality and SQA). His current responsibilities include Heat Treating, failure analysis, process improvements, selection and evaluation of new heat treating equipment and processes. He played an active role in setting up of new state of art heat treating facility at Axles unit of TML Drivelines. Prior to joining TML Drivelines, he was with Bharat Gears Ltd looking after Metallurgical Laboratory and Heat Treatment shop, where he started his career.

Born and brought up at Bhilai, Anshuman did his Bachelor of Metallurgical Engineering from National Institute of Technology, Raipur in year 1998. After completing his graduation, Anshuman started his career with Bharat Gears Ltd, Faridabad plant. He was a part of team having responsibility to set up and establish the new Heat treating facility at Faridabad. He has visited most of the major Indian Steel mills and many forge shops specially making Gear Blanks & Transmission Forgings, for vendor evaluation, Product and Process Quality Audit. He has also worked with Escorts Ltd's Railway Equipment Division for setting up of manufacturing facility for rail fastening clips, during 2002-2004.

Anshuman's field of interest includes Forgings, Castings, Heat Treatment, and Failure analysis . He was runners up in operations module of 'On the Job achievers' Contest Lakshya'09 organized by NITIE Mumbai.

Anshuman is certified lead auditor for OHSAS18001: 2007 and an Internal Auditor for TS16949:2009 from Bureau Veritas Certification. He did a short term management course conducted jointly by Tata Management Training Centre(TMTC) and Symbiosis Institute of Business Management(SIBM) Pune. Presently he is pursuing Certified Production and Inventory Management (CPIM) course from American Production and Inventory Control Society (APICS).

Anshuman strongly believes that in coming years India would be a leading force in metallurgical research and many new innovations would come out of here. Being an ASM's member gives him an opportunity to network with people in the same field, to talk about technical problems and learn the new developments in the field of Metallurgy.

Anshuman married to Usha. Usha is working as software support person to many company from home. She has done major projects with Escorts Heart Institute, Delhi, Sir Ganga Ram Hospital, Delhi & Prerna Classes, Jamshedpur. Anshuman & Usha are blessed with lovely Daughter Krishna who is four months old.

Though located geographically away from Pune , Anshuman wants to participate in ASM Pune Chapter activities. He is keen to support Membership Development Committee, by taking some responsibility in Member Needs Survey with LD Deshpande coming year, which he feels can be done using e mails & teleconferences etc.

Anshuman can be contacted at +919031057258 and anshuman.ganeriwala@tata.com.

Know Our Members



Shirish Nagarkar, Plant Head, RSB Transmissions (I) Ltd, Pune, is Sustaining Representative Member, Representing RSB Transmissions (I) Ltd. He is Alumnus of Govt College of Engineering, Karad. He obtained his BE (Mech) Degree from Shivaji University, Kolhapur. He is University Rank holder with Third Position in Shivaji University. He joined Tata Motors Ltd, Pune as GET to start his career. During 17 Years career at Tata Motors, Shirish handled various responsibilities in the areas of Manufacturing, Project planning and Execution, New Plant setup. He was instrumental in Planning & Execution of Green Field Project – Engine Plant at Pant Nagar Unit & Car Plant, Pune. With 17 Years successful career with Tata Motors, he joined RSB Transmissions (I) Ltd Jamshedpur, Axles as Plant Head. He completed this green field project and was instrumental in enhancing the plant capacity to almost triple. He is currently responsible for all plant functions of RSB Pune plant which manufactures mainly Gears, Axles, Bearing cross and cup and has state of the art heat treatment facilities.

As a part of Career progression, he has done PG (MBA) in Business Management from XLRI, Jamshedpur.

Shirish has traveled extensively in the world and visited developed countries like USA, Netherlands, Japan, Germany, Italy, as a part of his job assignments along with other countries such as Singapore, Malaysia, Hongkong, Thailand, UAE.

Sportsman Shirish plays Table tennis, Chess. He is also having keen interest in Listening to classical and all types of music, photography, arranging cultural programs, arranging various programs such as picnics, variety entertainment.

Shirish strongly believes in Societal & Professional obligations. As a part of his belief, he has conducted various training sessions for Needy Society in rural Pune areas, while he was Secretary of Telco Community Development Center. As a step towards fulfilling his Professional obligations, recently, Shirish has started participating actively in ASM Pune Chapter activities.

Shirish stays with his family in Pune. His wife Smita supported his career progression as a enthusiastic Home Maker. On family front both are busy in up brining of their Sons – 14 years old Akash studying in standard IX in Bishops and 12 years old Sagar, studying in standard VII in Bishops.



Nitin Joshi, DGM Metallurgy and Heat Treatment, Head Quality

Systems and Management Representative is Sustaining Representative Member, Representing ZF Steering Gear (I) Ltd, Koregaon Bhima, Pune, since 2005. Alumnus of College of Engineering Pune (COEP), he completed his BE (Metallurgy) in 1991. Bajaj Auto Ltd, Aurangabad was his starting point for career. After completing his training as GET, he continued with Bajaj Auto Limited, Aurangabad.

During his 3 years career Nitin has handled responsibilities in the areas of Heat Treatment and Receipt Quality Assurance, in Bajaj Auto. Later he joined Integrated Steel Plant, Lloyds Steel Industries, Wardha. He handled assignments of Project planning and subsequently managed hot rolling mill production function, at Lloyds. With 7 years career with Lloyd's Wardha, Nitin took assignment in ZF Steering Gear India Ltd Pune, 10 years back.

Qualified Lead auditor of TS 16949, ISO 14001, CQI-9.0 HTSA; Nitin has also completed his PGDPM- PG Diploma in Production Management from IIMT–Chennai.

Nitin represented ZF India at ZF Group Quality conference in Stuttgart Germany in 2007. Apart from this, he traveled extensively world wide visiting ZF group companies and various Automotive OEM's in Germany, Poland, Czech Republic, France, Korea and USA.

Seasoned Trekker Nitin is also Wild Life fan & voracious reader. He is concerned about depleting Wild Life and taking out his time for Wild Life conservation movement as a Member of world wild life fund –WWF. Nitin is also sports persons with interest in Table Tennis & Basket ball. Apart from ASM, WWF Nitin is also member of IIF - Indian Institute of Foundryman, Pune Chapter.

With Nitin's keen zeal in continuous Technical Knowledge up gradation and sharing it with other professionals, he is supporting Technical Program Committee activities of ASM Pune Chapter. He was instrumental in organising Technical Presentations - LPC Vacuum Carburising by Joachim Boss, ALD, Germany and Modern control systems for furnaces - by Jens Baumann Process Elektronik, Germany.

Nitin married to Praniti & stays with his family in Pune. Praniti is Home maker & busy in up bringing of their Seven years old daughter Arya, with Nitin. Arya has started her formal education and is second standard student in New India School, Kothrud, Pune. She is also pursuing training in Indian Classical Music under Ms. Varsha Godbole –Sargam Sangeet Vidyalaya and Bharat Natyam under guru Ms. Suvarna Srivastava—Nrutyanjali Nrutyaniketan.

Nitin is aiming for sparing his time from his busy work schedule and formally take responsibility in Technical Program Committee of ASM Pune Chapter, in near future.

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Origami with Colour Coated Ultrathin Foils of Stainless Steel

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Origami is an ancient Japanese art of paper folding for fun. Today Origami is an advanced fine art rather than a simple paper craft. The complex structures and models that are being built using basic origami techniques often use high level of mathematics. Thus on one hand, it is aesthetically appealing to us and on the other hand, it requires high degree of science and engineering to bring about the complex folds. It is a combination of the faculty of art, science, engineering and architecture. A public sculpture of origami displayed in the outdoors, requires material that can sustain rain, dust, sunshine and climatic changes.

This development of an ultrathin "paper" of stainless steel for an outdoor sculpture of origami started in 2002. The objective of this work is to induce qualities of paper in a foil of stainless steel, such that a public sculpture of origami could be folded with it. In some previous papers, finite element modeling of folding ultra thin stainless steel foil is described (Datta, 2003 and 2004). In this article, a simple model of folding a colour-coated stainless steel foil is described.

The planned installation of the sculpture is a bouquet of yellow roses (Fig. 1) of friendship that will be installed signifying international friendship and understanding. The interference method of coating the foil is used to bring out warm yellow colour on the foil. A warm yellow colour has been obtained by special heat treatments on the SUS304 stainless steel foil supplied by Nippon Steel Corporation. The origami design of the yellow rose (Fig. 2) is given by the world famous origami artists Paul Jackson and Miri Jackson (Jackson, 2003).

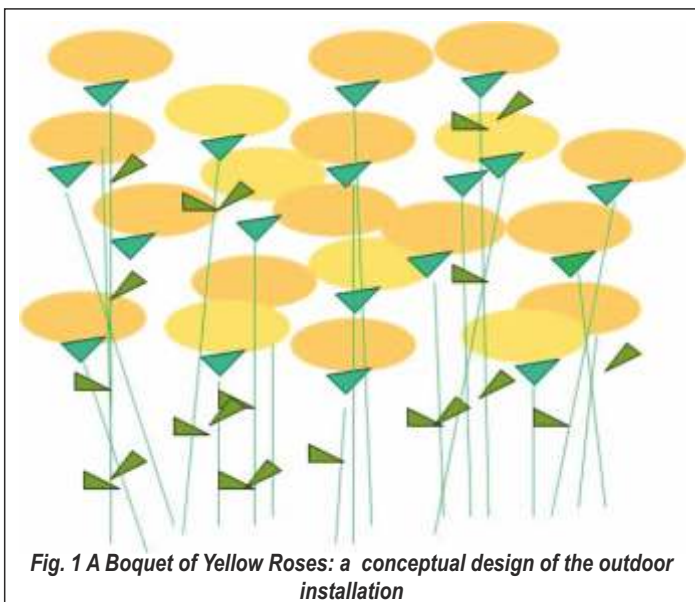


Fig. 1 A Bouquet of Yellow Roses: a conceptual design of the outdoor installation

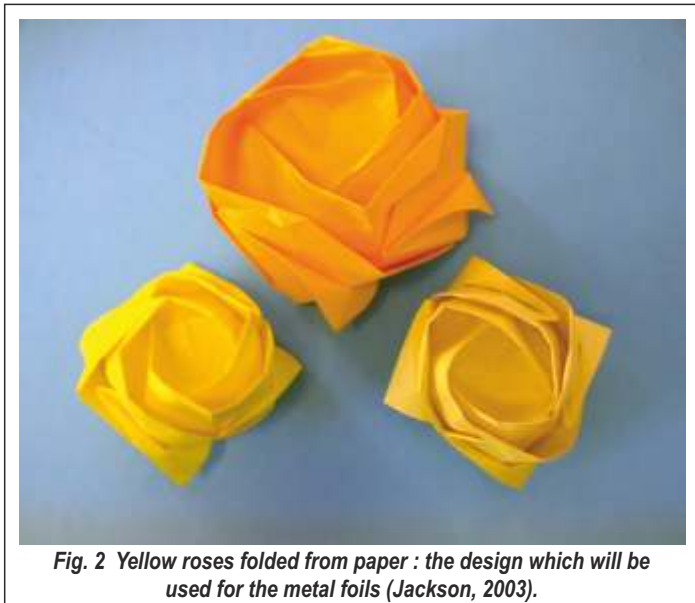


Fig. 2 Yellow roses folded from paper: the design which will be used for the metal foils (Jackson, 2003).

The Finite Element Method (FEM) model simulates the folding action as presented in the earlier paper (Datta, 2003). It is further modified to include a layer of colour coating on either side (Datta, 2004). Since both the length and the width of the foil are infinitely large compared with the thickness of the foil, the out-of-plane parameters do not vary significantly.

Therefore a plane stress/strain formulation is sufficient to model the through thickness variation in strain around the folded part of the foil. A 2D plane strain model with CPE4 elements is built. The foil lies on a rigid analytical surface like a table and another rigid analytical surface on top of the foil acts as the press like fingers. The bottom right half of the foil is tied to the table and one corner node is encastered. Since the foil is first folded over, contact pair is established between the remaining half of the bottom layer which makes contact with the rigid surface on top which presses the foil down. The mechanical and other physical properties for SUS 304 stainless steel foil are obtained from Nippon Steel Corporation (Advanced Metal Foil, NSC, 2000). The elastic-plastic material option is chosen. An implicit static analysis is carried out in four steps as follows with a few intermediate steps to ensure physically realistic boundary conditions.

- The top left corner is moved a little along 22 direction.
- It is then moved to right along 11 direction towards the right hand edge.
- The analytical rigid surface on top descends up on the folded foil and squashes it down.
- Contact pair is removed.

A careful inspection, at the origami folding sequences (Fig. 2) show that the folds do not undergo any reverse bend and the maximum strain it experiences is in a single fold. Therefore modelling a simple folding operation is good enough to design the sequence of heat treatments and folding operations. The development of principal and shear components of stresses along the fold line are studied. Figs. 3a and 3b represent the principal stress in 11 direction and the shear stress in 12 plane along the bottom layer of the folded foil. Figs. 4a and 4b show the contour plots how the

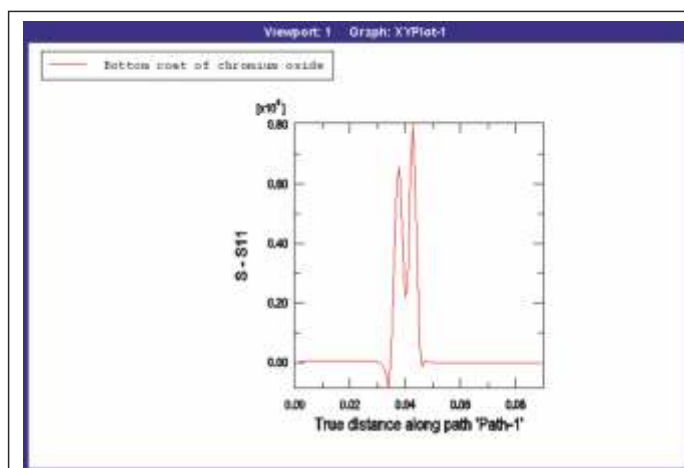


Fig. 3a Principal stress (Pa) along the colour coated layer on the bottom of the folded foil.

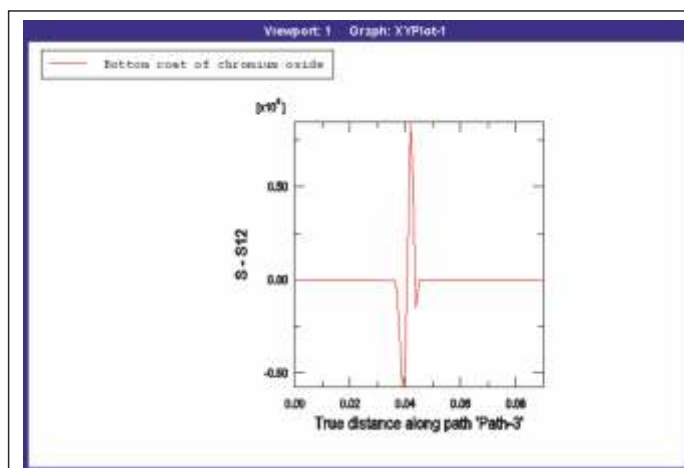


Fig. 3b Shear stress (Pa) in the coated layer on the bottom surface of the steel foil.

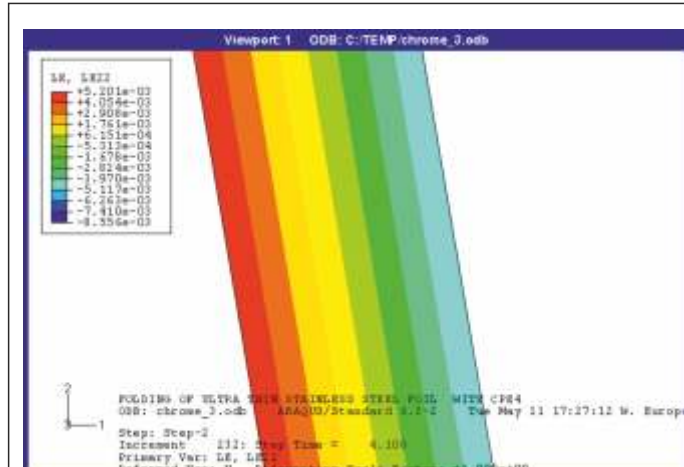


Fig. 4a Development of plastic strain in the folded foil across the thickness

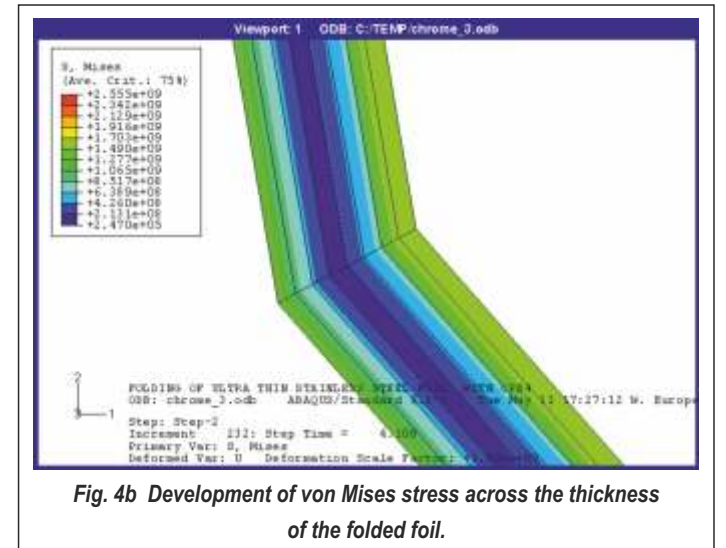


Fig. 4b Development of von Mises stress across the thickness of the folded foil.

principal strain in 22 direction and the von Mises stress vary around the bent and folded part of the foil.

There is a reversal in the direction of shear at the fold. Tensile stresses dominate at the outer surface of the folded foil. The colour coated surface layer is formed by special heat treatments and the foil is eventually cooled down to room temperatures. This creates contraction on the surface and generates some compressive stresses within the surface coating. Thus chances of fracture of coating layer will be less if compressive stress is retained at room temperatures before starting to fold the foil. Thus a sequence of folding and coating operation can be designed to achieve the final figure of the rose.

Acknowledgments

The author would like to thank the Netherlands Institute for Metals Research (now called Materials Innovation Institute), University of Twente, Cranfield University and Nippon Steel Corporation for supporting this study. Many thanks to Professor J. R. Nicholls and Mr. T. P. Pryor of Cranfield University for conducting the colour coating operations at the laboratory of high temperature materials. The author is very grateful to Mr Paul Jackson and Mrs Miri Jackson for their valuable advice on development of metal foil for folding origami. She is also very grateful to Mr. Toshiki Yabuta of Sankyu Inc., Japan for his continued encouragement for this study. She also conveys her heartfelt thanks to Mr. Hiromitsu Akagi of Nippon Steel Corporation for encouragement and continued patronage for this study.

References

- Datta K., H. Akagi, H. J. M. Geijselaers and J. Huétink, 2003 Abaqus Users' Conference, 4-6 June, Munich, Germany.
- Datta K., J. R. Nicholls and H. Akagi, 2004 Abaqus Users' Conference, 27 May, 2004, Cambridge, MA, USA.
- Advanced Metal Foil, Nippon Steel Corporation, Catalogue no. NM-SF-000401, April, 2000.
- Jackson P. and M. Jackson, design of the yellow roses, December 2003.



Kanyakumari received Bachelor in Metallurgical Engineering with Honors from Jadavpur University in Calcutta in 1989. She then joined the Research and Development Division of Tata Steel and worked on physical and mathematical modelling of iron and steel making processes. She received Master of Technology from the Indian Institute of Technology in 1993 and then completed her Ph D in Engineering Materials from the University of Sheffield in 1996. The subject of

her thesis was Finite Element Modelling of Hot Rolling. She returned to India to work with Tata Steel in its Hot Rolling Technology Group as Manager. In 1999, she was promoted as Assistant Divisional Manager in the Automation Division of Tata Steel where she initiated the major capital project on on-line control of the mechanical properties of the hot rolled steel coils. She joined the Netherlands Institute for Metals Research (now called Materials Innovation Institute M2i) in 2001 on a short-term fellowship to research on modelling the deformation behaviour in metastable stainless steels on a project for Philips B.V. From 2006 she works as a consultant as a part of Data Metallurgical Company. She is also a visiting Faculty and member of the academic committee of the School of Nano Technology and Materials Science of Jadavpur University, Kolkata. Kanyakumari stood first for the Jagadish Bose National Science Talent Search Project in 1986. She received the Institute Silver Medal of the Indian Institute of Technology for topping the rank for M-Tech study. She also obtained the prestigious award of the Worshipful Company of Ironmongers of the UK in 1994/95 for her research work and her thesis received the Daniel Doncaster prize of the University of Sheffield in 1997 for the high quality of research reported therein. She is a biographee of Reference Asia (vol. 11, p.87), Asian-American Who's Who, Marquis World Who's Who 2010.

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Young Student Members Awaiting You!

Our Chapter have two Active Materials Advantage Chapters: SIET – Sinhgad Institute of Engineering & Technology and GPP - Govt. Polytechnic Pune .

Two more starting soon: COEP – College of Engineering Pune & Cummins College of Engineering, Pune.

Our student members looking at you as Materials Engineering Icon.

They are eager to hear your experiences, meeting you, chat with you, ... & so on!

Invite them to your company for visit.

Challenge them with small Projects & get innovative simple Solutions from them!

Spare your sometime of Students Member.

Be their Mentor.

Contact Sudhir Phansalkar, Chairman, Students Outreach at Sudhir.Phansalkar@dana.com or on 98222 09917 or at asm.pune@gmail.com.

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Your ASM Chapter can help you to get better Materials jobs in Network member companies! Please send your CVs to asm.punejobs@gmail.com or asm.pune@gmail.com (mention CV - Experience XXX yrs in subject line).

Also upload your Biodata on www.asminternational.org

Complimentary Support for members only. You can avail this opportunity immediately by joining ASM Pune Chapter or Students Chapter as applicable.

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Opportunity to understand exciting world of Materials Engineering. For Students of 10th to 12th Standard.

Get exciting hands on experience of - Heat Treatment, Metallography, Foundry Practices - Sand molding, induction melting, Die Castings etc., Corrosion, Pyrometry, Welding, NDT Techniques - MPI, UT, PT, ET & RFI. Opportunity to visit Industries like Tata Motors, Emitec, Trumpf & ARAI.

Fees & Charges - Your Genuine Interest & Sincerity.

14th - 19th May 2012 - Full Time (9 AM to 5 PM). Lunch & Breakfast complimentary.

All at - Fourth Materials Camps at COEP

For participation

Contact Sudhir Phansalkar

sudhirph@hotmail.com OR

Rahul Gupta - rahul9463@gmail.com

Limited Seats

Do You Know Young Materials Professionals?

Special drive of Pune Chapter to bring in Young Professionals, understanding their needs & reservations.

Do you know any Young Materials Engineering Professionals, not yet member of ASM? May be from your company, supplier, service provider, customer, competitor company.

“Needs of Young Professionals” coming soon!

Please send their names & contact details to Vikas Dhamankar, Chairman, Young Professionals Committee at vikas.dhamankar@fiapl.com or on 97659 99214 or at asm.pune@gmail.com

Volunteer yourself for your Chapter!

For more efficient working & expanding network of your ASM International Chapter, please support your chapter by offering your time. Lot of avenues to choose areas of your liking. Options are - Membership Development, Education Programs, Students Outreach, Member Service, Website, News Letter, Technical Program and Social Events. Contact ASM International Pune Chapter asm.pune@gmail.com

TECHNICAL TALK AT SIET STUDENTS' CHAPTER

Mr. Surendra Datar, Deputy General Manager, tool Engineering Tata Motors Limited, Pune delivered a guest lecture on cutting tools organised by ASM international Pune chapter for student members & non member students of Third Year Production Engineering Department of Sinhgad college of engineering. Mr. Surendra Datar has been working for Tata Motors for almost 30 years and has gained a lot of experience in this field.

Mr Datar and the other ASM members present were felicitated by Prof Bagchi, Head of Department. After felicitations, Mr. Datar delivered technical talk explaining the students the basics of cutting tools to the latest developments in them. He showed pictures of various tools and explained as to why they have the unique geometry. Although newer and more advanced cutting tools a entering the market, they are being developed only by improving the tool geometry, tool material, method of manufacturing and machine tool used. This information given to us by Mr. Datar us new to almost everyone. Explaining everything with pictorial references made the lecture very easy to comprehend and also very interesting. Once the students were through with the basics, he discussed about the various experiences he had in his field. This gave everyone an insight as to what goes on in an industry and the problems faced in real time. The lecture was a very knowledgeable and interactive, and everyone enjoyed it.

*Nishant Gupta,
TE production SCOE*

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PHOTO GALLERY

