Portfolio

Xuejun Fan
Professor
Department of Mechanical Engineering
College of Engineering

for

2015 Piper Professor Award

Nominated by

Victor Zaloom
Associate Dean
College of Engineering
409 880 8805

October 11, 2015
1. Teaching Innovation and Course Development

- **Integrating the real-world problem-solving in teaching**
  Dr. Fan had 10 years of experience at world-class industry laboratories including serving as a senior member of research staff for Intel Corporation. He has included cutting-edge real-world engineering problems into his classrooms and integrated them in his teaching to facilitate students' critical thinking and problem solving skills. Dr. Fan developed a whole set of real-world problems in each topic of each course to illustrate the textbook theory and help students to apply the knowledge gained. He inspires students to use classroom learning to solve cutting-edge problems in their course projects. For example, light emitting diode (LED) has now emerged as promising technology to replace conventional lighting due to its superior energy efficiency, environmental friendliness, and particularly long lifetime. However, thermal management becomes one of the most critical issues in LED development. Students enrolled in MEEN3310 Heat Transfer Spring 2014 have successfully developed a hybrid approach that combined analytical model learned in the class with experiments to predict the lifetime of LEDs. As a result, this work has been published at the proceedings of the 12th International Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems. The paper has been selected for consideration to publish in Microelectronics Reliability Journal.

- **Fostering students’ lifelong learning skills**
  An endeavor of higher education is to prepare students to be a lifelong learners beyond the scope of classroom teaching. To help students become self-directed lifelong learners, Dr. Fan innovated the MEEN 4110 Seminar course by introducing a ‘virtual’ conference format throughout the semester. In the beginning of the semester, students learned about literature search and selected a topic of interest to present to their peers in the class. Each student wrote an abstract of their own research to pick. A peer-review process followed, in which each abstract was assigned to two anonymous student reviewers in addition to the instructor for comments and feedback. Then, students developed their full papers and presented their research results in class. A peer-review process for the full paper was then conducted. Toward the end of the semester, each student prepared a poster for a “conference”, in which all Mechanical Engineering professors, junior and senior students were invited to attend. Throughout the process, students not only learned in-depth about their own topics but also the various topics from other students.

- **Integrating technology into the classroom**
  Integrating technology into the classroom is a great way to accommodate diverse learning styles. Dr. Fan uses extensively a variety of the latest technology in his classes to enhance his teaching effectiveness. He has introduced the “clicker” into classrooms. Students use their cellular phones to respond and interact with instructors for class quizzes. The answers are immediately tallied and displayed on a classroom projection screen where both students and instructor can see and discuss them. Dr. Fan also uses “flipped learning” concept for certain topics. He developed a hybrid approach to use a screen capture program to capture his hand-written annotations on lecture with audio. This setup encourages students to view or listen to the lecture before class and then participate in class activities.
intended to help them fully grasp the subject. Dr. Fan also uses “dicker” technology for exams. Students are given paper test first. Then, in the last five minutes, students are allowed to power on their cell phones to input their answers electronically. Dr. Fan also develops a large pool of more than 1,000 problems for computer-based tests for some of his courses. Such efforts have effectively eliminated cheating during examinations.

- **Course development**
  Dr. Fan has developed 9 new courses since 2007 as following
  - MEEN 4324 Engineering Fracture Mechanics
  - MEEN 4325 Undergraduate Research
  - MEEN 6385 Continuum Mechanics
  - MEEN 6387 Fracture and Fatigue of Solids
  - MEEN 6386 Multiphysics Modeling in IC Packaging and Microsystems
  - MEEN 6388 Variational Principles/Energy Methods
  - MEEN 5326 Component/System Design with Simulation
  - MEEN 5325 FEA with ANSYS
  - MEEN 5328 Advanced Heat Transfer and Applications

2. **Undergraduate Research and Community Engagement**

- **Undergraduate Research**
  Dr. Fan has created MEEN 4325 Undergraduate Research course as a senior-level elective, and has offered the course in each of the past seven years to the high-achieving undergraduate students in Mechanical Engineering. He designed a variety of professional and educational activities for students. These activities provide enrichment program throughout the course for undergraduate students. These activities have helped students to gain new information, generate new ideas, integrate new knowledge with their own personal experiences, make informed decisions, and set and achieve goals. The evidence of success is reflected in the testimonies of Mark Placette and Matthew Carl, who are currently Ph.D. students at Iowa State University and North Texas University respectively (The letters by Mark and Carl are supplied in the packet as supplemental materials).

  Dr. Fan has mentored 21 undergraduate students to participate in research. Thirteen students have presented their work at international, national, and regional conferences, such as ASME (American Society of Mechanical Engineers) International Mechanical Engineering Congress and Exposition, IEEE (Institute of Electrical and Electronics Engineers) International Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems, ASEE (American Society for Engineering Education) Gulf Southwest Annual Conference, and Texas STEM Conference. One group of students won the Best Student Paper Award at Gulf Southwest Annual Conference. Two groups of students received OUR undergraduate research grants in two consecutive years of 2013 and 2014. Ten peer-reviewed papers, authored or co-authored by undergraduate students, have been published in journals and conference proceedings. One paper, written by Mark Placette in Journal of Microelectronics Reliability, has had a total citation of 17 times since its publication in 2012. Four students that Dr. Fan mentored for undergraduate research pursued or are pursuing their PhD degrees.
Dr. Fan received Inaugural Lamar University Faculty Mentor Award in 2015. He received Lamar University Presidential Faculty Fellowships in Support of Undergraduate Research/Creative Activity in 2014 and 2015, respectively.

- **Community Engagement**
  Dr. Fan has had long-established relationship with local schools by volunteering in STEM activities such as ISWEEP, TSMAC, and UIL, and has a long and proven record in community engagement. For example, he supervised Mr. Yuci Shen, a 17-year old high school student on a research project that was performed during the student’s internship at Lamar University. Mr. Shen wrote a paper, which was accepted for the publication in the conference proceedings and for oral presentation. Mr. Shen became the youngest speaker in the 65 years history of Electronic Components and Technology Conference. The audience was very impressed by the quality of the research and the clarity of his presentation.

3. **Course Evaluation**

- **Teaching Score**
  Throughout his career at Lamar, Dr. Fan’s average score for overall teaching for his lectured courses has been constantly above 4.7, higher than department average, college average and university average. The following are the bar charts of evaluations for the lectured courses in 2013, 2014, and 2015

![Question Averages Chart](image)

MEEN 3310 (Spring 2015, 58 students, 64% Response Rate)
MEEN 6388 (Spring 2015, 32 Students, 59% Response Rate)

MEEN 6387 (Fall 2014, 41 Students, 56% Response Rate)
MEEN 4324 (Fall 2014, 38 Students, 36% Response Rate)

MEEN 6388 (Spring 2014, 36 Students, 36% Response Rate)
MEEN 3310 (Spring 2014, 44 Students, 57% Response Rate)

MEEN 4324 (Fall 2013, 26 Students, 92% Response Rate)
Students’ comments and feedback

The following are students’ raw feedback and comments

Dr. FAN has the best method of teaching the class, his structure and natural rhythm is among the very best I’ve ever experienced. I could really follow his class very well while taking notes.

Best professor I have had by far.

Tests are challenging but not unreasonable. Dr. Fan presented the information very well.

Wow! Great instructor; Very clear in explanation. Very willing to help students. Very knowledgeable about the subject. Always prepared for lecture.

Generally excited about his class and has strong communication skills. He is very thorough in his lectures and made it easy to learn.

Everything!!! This is undoubtedly the best professor in the mechanical engineering department. he is methodical in his teaching techniques and it makes the course so much easier. he is the only professor in the mechanical engineering department was doesn’t use slides on a Powerpoint to teach. and this is great!!! he goes over the material slowly and over and over again. he doesn’t rush through things and he explains every last detail of the problems he is solving. his class was a breath of fresh air compared to the other classes we are taking.

Presentation of the chapters were clear and organized. Understood each process when solving the problems. I enjoyed the lectures and real life situational examples.

Very organized and clear notes!
Excellent teaching methods.
He is the with no question the best professor I have had throughout my three years at Lamar. Great, clear explanations and teachings. Will sufficiently answer any questions related to heat transfer.

Straight to the point, fair grader with partial credit
Dr. Fan is the best professor that I have had at Lamar. I have been able to learn from him easier, and I am confident that I understand heat transfer better than any of my other classes. Dr. Fan may be the best professor that Lamar’s mechanical engineering has.

Hands down the best professor I’ve had in my 3 years at Lamar. Wish he taught every single one of my courses. Explains material to where it is crystal clear, is perfectly fair to all of the class, and always willing to help no matter how far behind a student's comprehension level.

I really enjoyed this class. The professor obviously has a strong understanding of the course material and is very considerate of the students. It would be nice if the rest of the professors taught their classes like this one.

Dr Fan is the best professor in Lamar in my opinion. The way he teaches is really appreciable. He starts with very easy topic in the class but at the end of the class he finishes with difficult topic. And that time it seems easy to understand the topics. He clarifies every detail of the problem.

he shows very difficult problems in a slow,easy and clear steps so that by the end of the class i am able to understand the most difficult problems of the course.

Dr. Fan is very nice professor. To be honest I become a fan of him. I would like to recommend anyone to take his course

Dr. FAN is a great instructor and had made a very hard subject very interesting and fun to learn.

Dr. Fan was very prepared. His lectures were clear, precise, and very easy to follow. He cared about the students and did everything he could to make sure the students were learning what they needed to learn.

The course was very well instructed. The class was hard enough to make everyone learn the material, but not too hard as to discourage students. Dr. Fan was always available to help and was enthusiastic to do so.

Lamar needs to hire more professors like Dr Fan. He is above and beyond the best teacher in the mechanical engineering department and the best professor I have had in my 5 years of college. Pay this man whatever you need to keep him here at Lamar. because he is a rare commodity.

The only reason I say this course was very easy for me is because Dr. Fan did such a great job teaching it. I have no doubt that if any other mechanical engineer teacher was teaching this class, it would not have been so easy for me.

Instructor conveys interest in the subject, grades fairly, and although the course work is challenging, students are encouraged to learn.

Teaching method by writing notes on blackboard. Pace of lecture. Dr. Fan always made sure the material was grasped by the students, and it was his desire to see the class learn.
A very good Professor and person, has a great ability to reach the students to get the material to stick.

very precise and clear about how each formula is derived and properly applied to problems

Clicker is cool!

Is very good at conveying information at a very nice pace for the course. Will make sure that all students fully understand the concepts, and then reviews them again just to be sure.

I ENJOYED YOUR CLASS. TEACHING METHODS WERE THOROUGH AND PRECISE.

de's not so much 'his' weakness but the size of the class makes it hard to read what he wrote on the board...sometimes

Dr. FAN is very prepared and has an incredible structured outline for teaching this class. I learnt a lot and he had it very interesting. I see that he really CARES! for the students success of learning.

Great professor! One of the best in the ME Department!

I really feel that Dr. Fan's teaching style is one of the most effective methods that I have ever experienced.

Dr. Fan is an excellent, well-organized instructor and among the best in the mechanical engineering department.

Always was there, cared about the student learning, vocalized expected performance from students

Dr. Fan is a very good instructor. He makes sure to communicate his expectations. He is always well-prepared for his course.

4. Research

Dr. Fan has made significant contributions in several research areas of microelectronics manufacturing and reliability, including moisture-induced degradation and failure, solder joint fatigue, advanced packaging design, LED reliability, etc. His work in these areas is widely recognized in the microelectronics industry around the world. He has published more than 180 peer-reviewed papers, 3 books, and 23 book chapters. The book chapter downloads of his two recent books have been more than 35,000 times in two years. His paper citations in Google Scholar have been more than 1800 times with an h-index of 26. Dr. Fan has been invited to give keynote presentation/invited talk/tutorial for more than 60 times at institutions, government agencies and companies worldwide since he joined Lamar University. He was invited to write two entries in Encyclopedia of Thermal Stresses. He is a contributing member for several reports on solid state lighting reliability released by the Department of Energy (DOE). Dr. Fan is a principal investigator for more than 20 microelectronics packaging and reliability research projects in excess of $1 million funded by National Science Foundation, U.S. Department of Energy, Semiconductor Research Corporation (SRC), State Key Laboratory of Solid State Lighting, Texas State Agency, and many industrial partners such as Texas Instruments (TX), Robert Bosch GmbH, Infineon Technologies AG, Maxim Integrated Products Inc., National Semiconductor, Philips, and
ANADIGICS, Inc. Dr. Fan received the prestigious 2011 Exceptional Technical Achievement Award from IEEE Components, Packaging and Manufacturing Technologies Society. In addition, his paper won 2008 Best Paper Award of IEEE Transactions on Components and Packaging Technology. Moreover, Dr. Fan is an IEEE Distinguished Lecturer since 2008.

The full list of his publications are provided as supplemental materials in the packet.
Supplemental Materials

- Letter from Mark Placette
- Letter from Matthew Carl
- Undergraduate Research
- Publications
- Presentations
- Grants
Dear Lamar University Office of Graduate Research,

I am writing on behalf of Dr. Xuejun Fan of the Mechanical Engineering Department in support of his nomination of the 2015 OUR Faculty Mentoring Award.

Dr. Fan was my undergraduate research mentor in 2010 and 2011 when I was a junior and senior. I worked under him for a microelectronics project sponsored by an NSF grant. With his assistance I was able to publish two papers and receive admittance to Texas A&M Mechanical Engineering Department’s Ph. D. program. Working with Dr. Fan was professionally and personally the most rewarding experience in my time at Lamar University.

There is much to be said about Dr. Fan’s mentoring methods, but I would like to emphasize the amount of great opportunities and learning experiences he intentionally provided me. When I started working with Dr. Fan, I was completely ignorant about the research process or graduate school. In fact, I had no professional or academic experience. Over the course a few years, he guided me through the process of literature review, experimental design, data collection and interpretation. He introduced me to graduate level mathematics and software to use in this research, and arranged training sessions on advanced instruments/techniques such as a TMA (thermomechanical analysis). I worked independently which help me significantly develop my skills, but I also had the opportunity to collaborate with graduate students and other professors. These experiences alone were very valuable, but Dr. Fan allowed me to write and publish my first paper on my work. I consider this to be priceless since it taught me about the publishing/reviewing process. After my time with Dr. Fan, I was not only prepared for graduate school, but I also felt ahead of most incoming graduate students from this experience.

I would also like to point out that I had several professional meetings with engineers with Texas Instruments while working on this project. As an engineering student, this was a huge opportunity for me to develop professional communication skills and expose me to industry.

As a mentor, Dr. Fan is both patient and courteous. He was always enthusiastic about answering any questions or problems I encountered and readily available for meetings if I were having trouble. I find it also difficult not to mention how much respect and kindness he treated my fellow students and other faculty. Though my research project was difficult for me, he made it enjoyable.

Dr. Fan went above and beyond what I expected from a mentor. I regard my experiences with him as the reason why I entered graduate school to pursue a career in research. I also contribute my success in being accepted to graduate school largely due to his efforts. This is why I am happy and honored to be able to support his nomination for the Faculty Mentoring Award. I have no doubt that even years after my leaving of Lamar University, he continues to influence and develop students.

Sincerely,

Mark D. Placette
Ph. D Student, Iowa State University
Dear Advisory Committee,

It is my pleasure to have the opportunity to write a letter of support for Dr. Xuejun Fan in receiving the 2015 Faculty Mentoring Award to honor his ability as an undergraduate research mentor. He is certainly deserving of the honor due to his ability introduce undergraduate students to the world of research, guide and direct them through intellectual problem solving, and teach students about the importance of presenting and publishing their work.

During my senior year at Lamar University as a Mechanical Engineering undergraduate student (fall 2011 and spring 2012 semesters), three other students and I were given the opportunity to further the radiator section of our senior design project into a separate undergraduate research project over the heat transfer of automobile radiators under Dr. Fan’s advisement and rather reluctantly we decided to accept his offer. Our accepting turned out to be one of the best decision I made over the course of my undergraduate career. For the project, we were first required to develop a theoretical model and then verify the model calculations using experiments on a commercial radiator. At times we struggled with the project. Constantly reading textbooks, editing parameters, changing equations, and developing experimental setups that made sense. However, Dr. Fan was always available to us when we had question or ideas on how to approach the problem effectively and held bi-weekly meetings for us to discuss our current progress to make sure we were always on track. Once we had developed a working model and developed an experiment, we were to present the research and write a paper for the 2012 ASEE Gulf Southwest Annual Conference. This was a bit nerve racking as an undergraduate student who had previously had zero research experience, but Dr. Fan watched us present over and over then gave us constructive feedback and confidence in our work. After we had written the paper, with lots of revisions and edits along the way, and given the presentation at the conference, we actually received an award for Best Student Paper (2nd Place) and the work was published in the conference proceeding! It is my opinion that the success of the project was mainly due to Dr. Fan’s mentoring and guidance along the way.

Only now do I fully understand the degree in which his mentoring has helped further my career. I’m currently a Ph.D. Candidate at the University of North Texas in the Materials Science Department and heavily involved in metallurgical research with published papers and many conference presentations. I truly believe that I would not be doing so or doing nearly as well had I not been a student under Dr. Fan. My short time with him taught me how to think and research effectively and communicate with the scientific community through papers and presentations at national conferences. It also helped to prepare me for the rigorous effort needed to finish graduate school as I now understand that graduate education is often filled with long days and even longer nights, and why he would push us harder when he know we were not doing enough work.

Had I not been under Dr. Fan, I would have never thought to extend my academic career past an undergraduate degree or had the necessary skill set to be successful so early in my career at UNT. I truly am grateful that Lamar University is lucky enough to have a professor like Dr. Fan that takes on undergraduate students with no research experience and mentors them to successful projects. His abilities as a mentor are what gave me the confidence, skills, and background I needed to pursue a successful career path in academic research.

Sincerely,

Matthew Carl
Undergraduate Research

Names of Undergraduate Students Mentored for Undergraduate Research

- Jackie Seamen (2008, 2009)
- Bree A. Babin (2009, 2010)
- Georgia Gilzow (2009, 2010)
- Mark Placette (2011, 2012)
- Matthew Carl (2012, 2013)
- Dana Guy (2012, 2013)
- Brett Leyendecker (2012, 2013)
- Austin Miller (2012, 2013)
- Ryan Barnett (2012, 2013)
- Clifton Cherry (2012, 2013)
- Trevor Howard (2013, 2014)
- Seth Kennedy (2013, 2014)
- Derek Tenner (2013, 2014)
- Carlos Felipe Ibarra (2014, 2015)
- Chris Corman (2015, 2016)
- Thomas Michel (2015, 2016)

Undergraduate Research Course

MEEN 4325 Undergraduate Research

Presentations by Undergraduate Students (student names are underscored)

2. Kretschmer TW. LEDs: Lighting the Future, Texas STEM Conference, Lamar University, Beaumont, October 4, 2014
Publications by Undergraduate Students

- Journal publications by undergraduates (student names are underscored)

- Peer-reviewed conference papers by undergraduates (student names are underscored)

Student Awards

- Carl M, Guy D, Leyendecker B, Miller A, The Theoretical and experimental investigations of the heat transfer process of an automobile radiator. Best Student Paper Award (2nd Place) at Gulf Southwest Annual Conference, El Paso, April 4-6, 2012.

Names of Students for Graduate Study

- White R. Lamar University, 2009~
- Seamen J. Lamar University, 2009~
- Placette MD. Texas A&M University, 2012~
- Carl M. North Texas University, 2013~
Publications

Books

Papers/Book Chapters (185 papers, 58 journal papers, 23 book chapters)
5. Huang JL, Golubović DS, Koh S, Yang DG, Li XP, Fan XJ, and Zhang GQ, Degradation modeling of mid-power white-light LEDs by using Wiener process, Optical Express. vol. 23, no. 15, DOI:10.1364/OE.23.00A966. 2015.
30. Fan XJ, Ranouta AS, Dhiman HS. Effects of package level structure and material properties on solder joint reliability under impact loading. IEEE Transactions on Components, Packaging and Manufacturing Technology. 3(1), 52-60. 2013


**Patents**

2. Fan XJ. METHOD FOR PROVIDING DOUBLE-SIDED COOLING OF LEADFRAME-BASED WIRE-BONDED ELECTRONIC PACKAGES AND DEVICE PRODUCED THEREBY
   1. US patent office, 10576615, 2003
   2. World patent office, WO2004152097, 2004
   4. China patent office, CN200480030339, 2005
3. Fan XJ. INTEGRATED CIRCUIT PACKAGE INCLUDING SEALED GAPS AND PREVENTION OF VAPOR INDUCED FAILURES AND METHOD OF MANUFACTURING THE SAME
   2. World patent office, WO2004030094 (A1), 2004
   3. European patent office, EP1550160 (A0), 2005
   4. China patent office, CN1685500 (A), 2004
   5. Australia patent office, AU2003260878 (A1), 2003
4. Fan XJ, Lord J, Keith W. THERMAL-EFFICIENT POWER CONVERTER ENCLOSURE FOR SOLAR PANELS
5. Fan XJ. JUNCTION TEMPERATURES MEASUREMENTS IN SEMICONDUCTOR CHIP PACKAGE TECHNOLOGY
6. Fan XJ, Xu P. LIGHT-EMITTING DIODE THERMAL MANAGEMENT SYSTEM
   1. US patent office, US 10562528, 2004
   2. World patent office, WO2005001943, 2005
   3. Korea patent office, 10200570252, 2005
   4. European patent office, 2004737085, 2004
   5. China patent office, 200480018753.X, 2004

**Invited Keynotes/Tutorials/Seminars**

1. Research beyond One Engineering Discipline – My Personal Research Experience, Faculty Talk, Lamar University, August 27, 2015 (invited talk)


34. Moisture related reliability in electronic packaging. Electronic Components and Technology Conference (60th ECTC), Las Vegas, NV, June, 2010 (professional development course).
38. IC package reliability considerations: impact of design, material and process. ASE, Taiwan, July, 2009 (invited presentation).
39. Design, reliability and electromigration in chip scale wafer level packaging. Electronic Components and Technology Conference (59th ECTC), San Diego, CA, June 2009 (professional development course).
41. Overview of thermal performance of various power-device packages. International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems, (EuroSimE), Freiburg, Germany, 2008 (plenary keynote).
45. Interfacial delamination and cohesive rupture of thin films in microelectronics. South China University of Technology (SCUT), Guangzhou, China, July 2008 (invited seminar).
46. Moisture related reliability in electronic packaging. IEEE CPMT Hong Kong Chapter, Hong Kong, July 2008 (invited workshop).
47. Micro-/nano- electronics and multi-scale analysis. Shanxi University, Taiyuan, China, July 2008 (invited talk).
54. Interfacial delamination and cohesive rupture of thin films in microelectronics. Tianjin University, China, December 2008 (invited talk).
55. Interface delamination and cohesive failure of thin films in microelectronics. Delft University of Technology, Delft, the Netherlands, 2007 (distinguished seminar presentation).
57. Interface/material failures due to moisture at elevated temperature in microelectronic packaging. Iowa State University, Ames, IA, December, 2007 (invited distinguished lecture).

**Conference Presentations/Posters**

69. Finite element modeling of anomalous moisture diffusion with dual stage model. Electronic Components and Technology Conference (ECTC), San Diego, May 29- June 1, 2012.
74. Some remarks on finite element modeling of electromigration in solder joints. 60th Electronic Components and Technology Conference (60th ECTC), Las Vegas, NV, USA. June, 2010.
75. JEDEC board drop test simulation for wafer level packages (WLPs). Electronic Components and Technology Conference (59th ECTC), San Diego, CA, June 2009.
77. Sensitivity investigation of substrate thickness and reflow profile on wafer level film failures in 3D chip scale packages by finite element modeling. Electronic Components and Technology Conference (57th ECTC), June 2007.
79. Field condition reliability assessment for SnPb and SnAgCu solder joints in power cycling including mini cycles. Electronic Components and Technology Conference (ECTC), June 2006.
82. Effects of dwell time and ramp rate on lead-free solder joints in FCBGA packages, Proc. of Electronic Components and Technology Conference (ECTC), 901-906.

Reports

Research Grants
5. Principal Investigator. LED System Reliability. $16,000. Texas HEAF Fund. 09/01/2012-08/31/2013.


17. Co-Principal Investigator. Research on Dynamic Responses of Flexible Electronics Structures. $55,000. Principal Investigator: Xiaqing Zhang (South China University of Technology). National Nature Science Foundation of China (NSFC), 01/01/2010-12/31/2012.


22. Principal Investigator. Reliability Mechanics Research Center in Microelectronics at SCUT. $206,000. South China University of Technology, China. 06/01/2008-05/31/2011.


