



The American Society of Mechanical Engineers

Central Oklahoma Section Newsletter

Volume 3, Number 3, October 10, 2001

The Section is located at:
Oklahoma Engineering Center
201 Northeast 27th Street
Oklahoma City, OK 73105

The Central Oklahoma Section Newsletter is nominally published nine times per year to convey monthly meeting dates, meeting topics, section activities, and/or other ASME information to its membership.

***** **Meeting Announcement** *****

Ms. Karen Warden – ASME Distinguished Lecturer

“Orthopaedic Engineering”

Date: Thursday, October 25

Place: Commons Restaurant, Continuing Education Complex, University of Oklahoma South Campus, 1700 Asp Ave. (Asp Ave. & Timberdell Drive – see map within), Norman, OK.

Orthopaedics is the medical specialty devoted to the diagnosis, treatment, rehabilitation and prevention of injuries and diseases of your body's musculoskeletal system. This complex system includes your bones, joints, ligaments, tendons, muscles and nerves and allows you to move, work and be active. Once devoted to the care of children with spine and limb deformities, orthopaedics now cares for patients of all ages, from newborns with clubfeet to young athletes requiring arthroscopic surgery to older people with arthritis.

Orthopaedic Engineering is a relatively new discipline within the Biomedical Engineering field. Range of topics include muscle and joint loads, musculoskeletal dynamics, articular cartilage and meniscus, tendons and ligaments, diarthrodial joints and articular layers, fracture fixation, the human spine, and design for artificial joints and replacements.

This promises to be a very enjoyable and informative meeting on a new engineering topic. **Plan to attend with us!**

Meeting Schedule and Contacts

Time: 6:00 - 6:30 pm Social and Registration. 6:30 - 7:15 pm Dinner at the Commons.
7:15 – 7:30pm Introductions and Recognition of Special Members.
7:30 pm Karen Warden: “Orthopaedic Engineering”.

Cost: \$15.00 for Senior members and guests, \$7.00 for Student members (students please bring your ASME membership card). **PLEASE PLACE RESERVATIONS BY 12:00PM (noon) TUESDAY, Oct. 23.**

E-Mail Reservations:	Ed Reynolds	edwin_c_reynolds@yahoo.com
OKC/Norman/Shawnee:	OU-AME Office	(405) 325-6772
Stillwater/Enid/Ponca City/Perry:	OSU-MAE Office	(405) 744-5900
Edmond/Guthrie:	OC- Engineering Office	(405) 425-5400
Lawton/Duncan/Chickasha:	Curtis Vickery	(580) 251-3573

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Additional October Meeting Information

Ms. Warden is a doctoral candidate in the Mechanical Engineering Department at Case Western Reserve University specializing in spinal biomechanics. She has been active in the field for the past ten years in academic, industrial, and consulting capacities, has co-authored numerous peer-reviewed publications and received research and achievement awards.

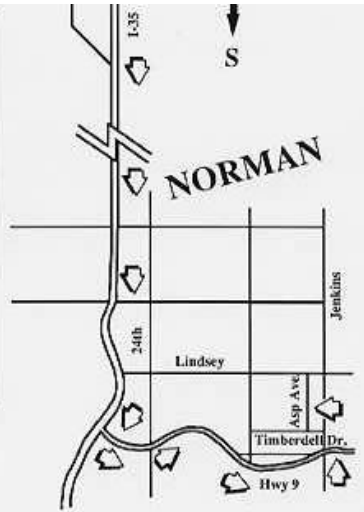
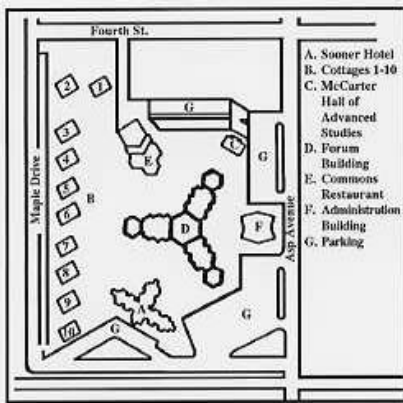
Some of Ms. Warden's co-authored publications are *"Biomechanical Evaluation of Cervical Spinal Stabilization Methods in a Human Cadaveric Model"*, *"Compression Strength of Allograft Bone for PLIF,"* *"Device-Related Osteoporosis with Spinal Instrumentation: A Canine Model,"* and *"The Influence of Bone Mineral Density on the Fixation of Thoracolumbar Implants."*

Karen is a member of the *American Society of Mechanical Engineers, American Society of Biomechanics, Biomedical Engineering Society, The Johns Hopkins Medical and Surgical Association, International Society of Biomechanics, and Orthopaedic Research Society.*

Her awards include "1989 Volvo Award for Basic Science Research in Low-Back Pain" (co-recipient), "1997 Cleveland Technical Societies Council, Technical Achievement Award" and "1997 Cervical Spine Research Society Research Award" (co-recipient).

Karen received her B.S. Mechanical Engineering degree in 1981 from West Virginia University. In 1985 she received her M.E. Biomedical Engineering degree from the University of Virginia.

At left is a map showing the route to the **Commons Restaurant** within OU's Continuing Education Complex, location 'E' on the insert.



ENGINEERS LESS SPECIALIZED, MORE MULTIDISCIPLINARY

A New ASME Study Examines Change in Engineering Practice and Education

Engineers are working across traditional disciplines and collaborating with other professionals as a necessary means to address complex challenges and solve the problems of today's modern technological era, according to a new study by ASME International. The study, *New Dimensions in Multidisciplinary Thinking*, examines change in the way in which engineering is practiced and learned.

Multidisciplinary thinking in engineering promotes a systems-oriented approach to technology development, which is the essence of innovation and a key driver toward development in such fields as nanotechnology, bioinstrumentation, and micro-electro mechanical systems. "Multidisciplinary approaches promise to set both the context and the agenda for science and engineering in the 21st century," says the study.

The multidisciplinary environment blurs boundaries between traditional technical roles and distinctions and promotes increased project teamwork. Multidisciplinary approaches also foster knowledge transfer. Says the study: "Knowledge production is no longer occurring strictly within disciplinary boundaries. Boundaries shift and overlap because ideas and techniques do not exist in a fixed place; engineers carry them through multiple groups and experiences."

Multidisciplinary thinking also has implications for engineering education. According to the study, some mechanical engineering programs are changing core courses and adding new electives in biology and chemistry. For more information contact Mel Torre, Phone: (212) 591-8157, E-mail: torrem@asme.org.

Computer & Technology Showcase Returning to OKC

The Central Oklahoma IEEE Chapter is again coordinating the Computer & Technology Showcase to be held November 27-28 (Tuesday, Wednesday) at the Myriad Convention Center in OKC. A variety of exhibitors, sponsors, and professional societies will be represented, and a range of seminars will be presented. For more information contact Bob Scollie of Oklahoma IEEE (Bob1440@aol.com) or check the website <http://www.techshows.com/oklahoma/oklahoma.html>



THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS CENTRAL OKLAHOMA SECTION BYLAWS

1.0 PREFACE

(This Preface is quoted from the Society's Constitution, Bylaws, and Rules).

Article R5C, Rule 1: "Each Section shall adopt its own Bylaws, for the conduct of its affairs, provided such are in harmony with the Constitution, Bylaws, and Rules of the Society, and provided also every publication of such bylaws be prefaced with a copy of C5, Sec. 2 of the Society's Constitution. A copy of these Bylaws shall be filed with the Executive Director and Secretary."

Article C5, Section 2: "The provisions of the Constitution, Bylaws, and Rules of the Society shall govern the procedure of all components of the Society, but no action or obligation of such components shall be considered an action or obligation of the Society as a whole. This provision shall be imprinted on any publication issued by such components."

2.0 NAME

2.1 The name of this association shall be the ~~Central Oklahoma Section of the~~ American Society of Mechanical Engineers, **Central Oklahoma Section**.

3.0 MEMBERSHIP

3.1 All members of the American Society of Mechanical Engineers residing within the boundaries established by the Society, or assigned by special request of said member, shall be considered members of the Central Oklahoma Section.

3.2 Student members residing in this area shall be members of the Section without vote.

3.3 All members of the Section of the following grades shall be qualified to vote in elections: Fellow, Life Member, Member, Associate Member, and Honorary Member who has been elevated from one of the preceding grades.

4.0 MANAGEMENT

4.1 The management of the Section shall be vested in a local Executive Committee made up of the officers and directors of the Section, and *ex officio* members of the Executive Committee. Only members qualified to vote in the Society shall be eligible to be members of the Executive Committee except as noted in Section 4.5.

4.2 The officers of the Section shall be ~~chairman, first vice chairman, vice chairman membership, vice chairman programs, vice chairman professional development, secretary, and treasurer~~ **Chair, First Vice-Chair, Vice-Chair Membership, Vice-Chair Programs, Vice-Chair Professional Development, Secretary, and Treasurer**.

4.3 The terms of all officers and directors shall be for one year. The ~~first vice chairman~~ **First Vice-Chair** shall automatically succeed to the ~~chairmanship~~ **Chair** for the ensuing term.

4.4 The number of directors for the ensuing term shall not be less than six and shall be determined by the Executive Committee at the time the Nominating Committee is selected. The immediate ~~past Chairman~~ **Past-Chair** shall automatically be a member of the Executive Committee.

4.5 The *ex officio* members of the Executive Committee shall be the ~~engineering deans and heads~~ **Heads** of ~~mechanical engineering~~ **Mechanical Engineering** departments **of universities** within the Section who are qualified to vote in the Society, and designated industrial members (without vote) as may be appointed by the Executive Committee.

4.6 New officers and directors shall be elected by secret ballot of those present at the regular January **Section** meeting and **by responses to the Newsletter ballot (ref. Articles 5.2, 5.4) and** shall assume office on the first day of July following.

4.7 The Executive Committee is empowered to appoint such standing committees as recommended by the Society in its Operation Manual.

4.8 The local Executive Committee is empowered to appoint, for special purposes, temporary committees upon which nonmembers of the Society may serve.

4.9 Any officer or director of the Executive Committee who for a period of three months (consecutively) does not take part in the management of the affairs of the Section ~~shall~~ **may** be subject to removal from the Committee.

4.10 The ~~first vice chairman~~**First Vice-Chair** shall succeed to the ~~chairmanship~~**Chair** in the event the office of the ~~chairman~~**Chair** is vacated during a term. When this office is vacated by both ~~chairman and vice chairman~~ **Chair and First Vice-Chair**, the Executive Committee shall appoint members to fill the office for the balance of the term. When replacement of any other office **or the filling of a vacant office** is necessary during a term, the Executive Committee shall appoint a temporary officer to fill the remainder of the term.

4.11 All appointive offices and committees shall be subject to discharge at the discretion of the Executive Committee.

5.0 ELECTIONS

5.1 ~~At~~**Prior to** its November meeting, the Executive Committee shall form a ~~nominating committee~~**Nominating Committee** consisting of the active ~~first vice chairman~~**First Vice-Chair** and ~~up to~~ three members appointed by the Executive Committee to recommend nominees and supervise election of the officers and directors. The immediate ~~past chairman~~**Past-Chair** of the ~~section~~**Section** shall act as ~~nominating chairman~~ **Nominating Committee Chair**, ~~and be the fifth member of the committee.~~

5.2 The Nominating Committee, so appointed, shall make its recommendations for the officers and directors at the ~~December~~**January** meeting of the Executive Committee. Notification of ~~their~~**officer/director nominee** selection shall be made to the membership ~~by letter to be mailed with the announcement of the regular December meeting.~~ **in association with the announcement of the regular January Section meeting (by Newsletter or separate mailing).**

5.3 Additional nominations may be made by petition, signed by not less than ten qualified members of the Section, and submitted to the secretary by not later than the January meeting of the Executive Committee. The names of such nominees shall be added to the ballot and so identified.

5.4 The ballot thus prepared shall be presented to the membership **as part of the January Newsletter, by separate mailing, and/or made available at** ~~for election at~~ the regular January **Section** meeting. A ~~tellers committee~~ **Tellers Committee** shall be appointed to canvas the ballots **up until the February Executive Committee meeting (first Thursday in February).** ~~at the close of the meeting and the~~ **The** results will be announced along with the February meeting notice. The elected officers and directors will be those having the greatest number of votes cast for respective offices.

6.0 MISCELLANEOUS

6.1 Propositions for amendments to these Bylaws may be submitted to the membership for consideration by the Executive Committee or by petition signed by not less than 25 qualified members of the Section. The vote shall be by letter ballot, to close 15 days from the date of mailing. If approved by a majority of the votes cast, the amendment or amendments shall become part of these Bylaws.

6.2 These Bylaws shall go into effect upon approval of a majority of the votes cast by the members of the Central Oklahoma Section.

APPROVED

Central Oklahoma Section Executive Committee

(Date) 2 November 1989

ADOPTED

Membership of Central Oklahoma Section

(Date) 7 December 1989

Chairman Wendell D. Cavin

Secretary Albert N. Janco

REVISION 1 APPROVED

ASME Central Oklahoma Section Executive Committee

(Date) 4 October 2001

REVISION 1 ADOPTED

ASME Central Oklahoma Section Membership

(Date) _____

Chair _____

Secretary _____

Section Bylaws Revision 1 Adoption

To all ASME Central Oklahoma Section Members:

During the past few months your Executive Committee has been reviewing our Section Bylaws with objective to bring them up to date, align them with our current practices, and implement changes in accordance with ASME recommendations. Change procedures were conducted in accordance with ASME Central Oklahoma Section Bylaws Article 6.0. Bylaws Revision 1 included here (Newsletter insert) is a culmination of this effort. Bylaws Revision 1 was approved by the Executive Committee per Article 6.1 on October 4, 2001. Article 6.1 further stipulates that any Bylaws amendment be presented to the Central Oklahoma Section Membership for adoption.

With regard to Bylaws Revision 1 presented herein, original text is presented in standard, Times New Roman font whereas additions or substitutions are presented in **bold Arial** font. Deleted text is shown with a strike-through line: ~~deleted text~~.

A few minor changes were of grammatical nature. Among the more significant changes were replacement of gender-specific office titles (e.g. chairman, first vice chairman) with gender-neutral office titles (e.g. Chair, First Vice-Chair). Also, we no longer hold a December Section meeting which affected our officer/director nomination and election processes. Lastly, the Bylaws previously permitted only those present at the January Section meeting to vote in Section elections. In recent years we have published the election ballot in the Newsletter and votes were accepted by mail-in. Bylaws changes will straighten these procedures out and ensure properly conducted Section elections.

You are urged to carefully study the Bylaws Revision 1 insert, then complete and mail this adoption ballot. Please mail your ballot in a regular envelope with your name on the return address only (not on the ballot). Per Bylaws Article 6.1, **ballot acceptance will close after 15 days from the date of mailing.** Assuming that this Newsletter was mailed on Friday, October 12, then **ballots will be accepted through Saturday, October 27.** Thus, your prompt attention is required. **Please mail ballots to:**

Mr. Edwin Reynolds, 6507 NW 96th Street, Oklahoma City, OK, 73162.

Thank you very much for helping with this revision process.

Official ASME Central Oklahoma Section Ballot (check one (1) box only)

YES, I am in favor of adopting ASME Central Oklahoma Section Bylaws Revision 1 as contained in the October 2001 Newsletter (Volume 3, Number 3).

NO, I am not in favor of adopting ASME Central Oklahoma Section Bylaws Revision 1 as contained in the October 2001 Newsletter (Volume 3, Number 3).

Chair's Corner

Dear ASME-Central Oklahoma Section Members:

Our second meeting of the year was another success with **37 attendees** including 10 student members. Our speaker, **Michael Bergey**, made an informative and interesting presentation on wind turbine generation in the State of Oklahoma, the United States (specifically the State of California), and international markets (primarily in rural areas).

We are looking forward to another interesting program this month in the Biotechnology field. Our speaker, **Karen Warden**, is an **ASME Distinguished Lecturer** from Case Western Reserve University, and her topic is "**Orthopedic Engineering**".

One of our goals for this program year is to meet with our members in outlying geographic areas (such as Ponca City, Duncan, Ardmore, and elsewhere) within the ASME Central Oklahoma Section. We are considering possibly a luncheon meeting which would be in addition to our current monthly Section meetings. However, in order to do this we need our members to volunteer to help plan and organize these efforts. **Please contact me** or any Executive Committee member if you are interested in helping with this initiative.

Again, please plan to attend our October Distinguished Lecturer Section meeting to be held Thursday, October 25 at Oklahoma University in Norman, OK. Bring a friend!
Ed Reynolds – Chair

ASME's Member Get a Member Campaign:

When you recruit a new member, 50% of the first year dues will be spent on Scholarships for M.E. students.

Introduce your colleagues to ASME and help the Society...

Help ASME

- Support and contribute to pre-college math/ science/technology (MST) education for students grade K-12.

International

- Improve and promote the quality in mechanical engineering education through ABET accreditation.

award student

- Develop and sponsor design contests and other activities to sharpen technical, professional and leadership skills.

scholarships by

participating in

- Offer financial assistance through student loans, undergraduate scholarships and graduate teaching fellowships.

the member-

get-a-member

- Develop and maintain codes & standards used around the world for the design, manufacture and installation of mechanical devices.

campaign!

- Develop partnerships with industry, academia, government and other professional societies.

Student Section News

The Central Oklahoma Section wishes our university ASME Student Sections the very best in 2001-2002. **Please consider attending a Student Section meeting in your area (Edmond, Norman, Stillwater) this year!**

This year's OSU-MAE Student Section officers are listed below. Let's wish them great success throughout the year!

President: Megan McConnell (megan17564@aol.com)

Vice President: Erin Holle

Secretary: Cody Braswell

Treasurer: Mark Hergenrether

Publicity: Jake Mueller

Activity/Student Council Representative: Cary Keen

Web Chairman: Seven Purdy

The logo for eMentoring features the word "eMentoring" in a stylized, blue, 3D-effect font. The "e" is lowercase and smaller than the other letters. The background is a solid yellow-green color.

Need a mentor? ASME International is launching a new e-mentoring initiative **for student members only**. Student members review information on prospective mentors online and choose the ones that best fit their needs. Email your top choices to us and we will match you on a first come first served basis. For more information visit our e-mentoring site at <http://www.asme.org/ementoring/>. Practicing engineers of all disciplines have volunteered as mentors.



Central Oklahoma Section – 3rd Place in 2000-2001
Region X Thompson Traveling Trophy Sweepstakes!



Aiming High in 2001-2002!



Future ASME-Central Oklahoma Section and Other Engineering Events

Date	Location	Program Topic and Speaker
October 18, 2001 (Thursday)	Tulsa Air and Space Center Tulsa, OK	Oklahoma AIAA Section Meeting Tour of the Tulsa Air and Space Center contact: John Madden, johnbarbmadden@home.com
October 25, 2001 (Thursday)	University of Oklahoma Norman, OK	Ms. Karen E. Warden, ASME Distinguished Lecturer "Orthopedic Engineering"
October 26, 2001 (Friday)	Ramada Inn & Conf. Center 4345 N. Lincoln Blvd., OKC	Professional Engineering (PE) Exams contact: okpels@pels.state.ok.us
October 27, 2001 (Saturday)	Okla. Engineering Center 201 NE 27 th St., OKC	Fundamentals of Engineering (FE) Exam contact: okpels@pels.state.ok.us
Nov. 15, 2001 (Thursday)	ATRC Research Center, OSU Stillwater, OKC	Oklahoma AIAA Section Dinner and Lecture contact: Eric Falk, falke@okstate.edu.
November 27- 28, 2001	Myriad Convention Center Downtown OKC	Computer and Technology Showcase Offering the latest in computer services, technology services, and associated personnel services.
December 6, 2001 (Thursday)	Okla. Christian University Gaylord Student Center Edmond, OK	Dr. Ken Zimmerman, Oklahoma Corporation Commission Public Utilities Department "Oklahoma Energy Deregulation"

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