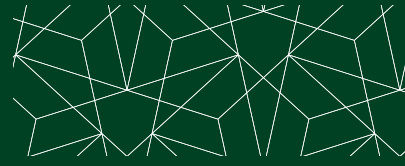


Summer 2023

Shillelagh



For members of the Missouri S&T Order of the Golden Shillelagh

newsletter

WELCOMING THE WELCOME CENTER





SOLVING FOR TOMORROW

Throughout history, our university has focused on the future, relentlessly seeking opportunities to make the world a better place. That legacy continues today as Missouri S&T students pursue opportunities yet to be defined. Prepare for unanticipated challenges. Plan for careers that don't yet exist — and define the future as they build it.

OGS members understand the difference a Missouri S&T education makes.

You give back to move our university forward. Your loyal support, both individually and collectively, has extraordinary impact on our students and programs.

Thank you for your leadership, vision and continuing confidence in our university.





Dear Friends,

This issue of the *Shillelagh* celebrates the groundbreaking of the **Welcome Center**, the 32,000-square-foot centerpiece of Missouri S&T's emerging Arrival District. The Welcome Center marks another important milestone in the bustling 10-acre construction project that began last year, known as the Arrival District. At Homecoming, we honored the many donors and OGS members making the Arrival District possible. Their generous investments are transforming our campus entrance into an impressive, student-centered campus experience for future Miners.

We are immensely grateful for the support the Welcome Center has received from the University of Missouri Board of Curators, University of Missouri System President **Mun Choi**, and the Kummer Institute Foundation. Next year, prospective students and families will have an inviting first impression of campus life in a focused facility that also houses our admissions and enrollment management teams.

We are also delighted to extend our sincere congratulations to **Wayne Laufer**, CE'67, who was awarded an honorary doctorate during Missouri S&T's spring 2023 commencement ceremonies. After exploring several engineering disciplines at Rolla, Wayne put his civil engineering degree to work in the oil industry, with great success. The generous philanthropy of Wayne and his wife, **Gayle**, has funded both faculty and students working on energy solutions and in other STEM fields.

Our donor profiles feature Dr. **James O. Stoffer**, S&T Curators' Distinguished Professor emeritus of chemistry, who has created a professorship in polymer chemistry matched with funds from the Kummer Inspiration Program. His generous gift supports the first endowed professorship in S&T's College of Arts, Sciences, and Education (CASE).

Doyle, CE'67, and **Suzanne Powell**, have continued their legacy of student support by establishing an endowed scholarship in civil engineering, as well as supporting the rejuvenation of the department's hydraulics lab. **Dennis Jaggi**, ME'70, is providing access and opportunity for the next generation of engineers and innovators with a scholarship endowment that supports K-12 students wishing to attend S&T summer camps. **John Berger**, ME'68, made a naming gift honoring his late wife, **Susan**, that will provide much-needed renovations to mechanical and aerospace engineering's academic advising offices. We sincerely thank these OGS members for investing in our university in such significant ways.

Please mark your calendars for June 6-8, 2024, and make plans to attend our "Shillelagh in St. Louis" OGS Weekend where we will celebrate the shillelagh spirit in the heart of the River City's Central West End. We'll share a full itinerary in early 2024, but you can count on a weekend of camaraderie in one of America's top historical neighborhoods.

With gratitude,

Tory Verkamp
Interim Vice Chancellor for
University Advancement

WELCOMING

the Welcome Center



S&T BREAKS GROUND ON IMPRESSIVE LAUNCHPAD FOR FUTURE STUDENTS

S&T hosted a groundbreaking ceremony for the 32,000-square-foot Welcome Center on campus at the construction site on Thursday, April 20, for an enthusiastic crowd of nearly 200 people.

Michael A. Williams, chair of the University of Missouri Board of Curators, University of Missouri President **Mun Y. Choi**, and Missouri S&T Chancellor and OGS member **Mo Dehghani** spoke at the event. The audience included members of the

Board of Curators as well as several members of the S&T Board of Trustees, state and local dignitaries, including Secretary of State **Jay Ashcroft**, EMgt'96, MS EMgt'98, and S&T faculty, staff, students and construction managers.

Located in the heart of S&T's emerging Arrival District, the Welcome Center will be the first stop for future students and their families, complete with an easily accessed parking garage. With state-of-the-art audiovisual equipment and static and interactive exhibits, the Welcome Center will provide an inviting campus experience with an up-close look at S&T's exceptional programs and facilities as well as the renowned achievements of Miner alumni.

The Welcome Center will also house enrollment management and admissions, streamlining the new student experience within one forward-looking facility.

Every square foot of the Welcome Center is designed to live up to its name, welcoming those interested in enrolling at our university and centralizing everything they need to make their decision. The project is scheduled for completion in Fall 2024.

- 1 Missouri Secretary of State Jay Ashcroft joins curator Robin Wenneker and Chancellor Mo Deghani to celebrate the groundbreaking.
- 2 Student ambassadors and the construction management team help curators and campus leaders commemorate the site.
- 3 Board of Curators Chair Michael Williams sits with President Mun Choi and other curators to watch the ceremony.
- 4 Welcome Center Steering Committee Chair Kate Drowne, professor of English and special assistant to the provost, prepares to break ground.



"The Welcome Center will be a great place to showcase all the opportunities for hands-on learning. Those opportunities are what really drew me to S&T, and they're why I stayed here throughout my undergraduate career."

KRYSTA SWARTZ, CE'23

Great River Engineering

Past president of the S&T Steel Bridge Design Team and former student ambassador





Conceptual rendering of the Welcome Center

HELPING FUTURE MINERS FIND THEIR PLACE AT S&T

The Welcome Center will revolutionize how new students experience S&T. After arriving from Tim Bradley Way, visitors will easily navigate campus tours and visits with admissions staff in this dynamic new building that features three levels of event spaces, presentation and meeting rooms, and ultramodern displays.

The center will also host events such as Miner Immersion, a day for future students to meet with faculty, staff and current students, participate in a design project, and learn about campus activities and organizations.

Support showcases the Miner Experience

The \$25.75 million Welcome Center capital project is funded through a combination of private support and university funds. Situated directly east of the new Innovation Lab that broke ground in April 2022, it is the second building on campus to embody the vision of **June** and the late **Fred Kummer**, CE'55, to transform our university and region through an emphasis on student success, research and economic development.

Missouri S&T is a place where hard work brings the future into focus — where experimentation is encouraged, mistakes are learning opportunities, and success is celebrated. It's where new relationships often turn into lifelong friendships. This comprehensive understanding of the Miner experience all begins at the Welcome Center. ■



"My due diligence as a first-generation college student is to welcome others. When you're properly welcomed you become a part of the ecosystem, and you take responsibility for contributing to it."

JOSEPH NGUYEN

A junior in mechanical engineering

Kummer Vanguard Scholar and manager of the S&T Satellite Research Team



BUILDING THE ROAD

TO A LIFE WELL LIVED



Doyle Powell, CE'67, grew up in the Missouri Ozarks, where his childhood fascination with building dams in local waterways inspired him to become an engineer. As an entrepreneur, he went on to build over 300 highways and road infrastructures in California through his company, D.W. Powell Construction.

Throughout his life, Powell set goals to reach his dreams. When he entered the Missouri School of Mines and Metallurgy (now Missouri S&T), his civil engineering curriculum required over 150 hours to graduate. He was determined to finish in four years and met that goal by taking 18–21 hours a semester while participating in the university's Army ROTC program.

"I was one of 60 guys living in the Kappa Alpha house, and all we did was study," says Powell. "We were constantly working on problems under stress to get them done on time, and learning how to do that paid off for me in the industry."

After graduation Powell went to work for Guy F. Atkinson, a large engineering contractor in Southern California, where he gained experience building roads, freeways and bridges. In 1969 at age 24, the U.S. Army drafted him into active duty, starting with basic training at Fort Leonard Wood. "My two years in ROTC and work experience

"The university gave me a step up to have a better life than what I came from, and I've done that. I wanted to give back."

gave me the opportunity to serve in Korea with the Corp of Engineers, not in Vietnam," says Powell. "After 18 months of military duty, I was back to building freeways."

Powell returned to work at Atkinson, then spent an interval in the housing development industry before joining Brutoco Engineering. In 1986 he founded his own company in

Fontana, Calif. Today the business operates as Powell Constructors, a second-generation highway-building contractor run by his son, Michael, also a civil engineer. His daughter, Michelle Cossota, owns a graphic design business and created the company's logo.

Powell was inducted into Missouri S&T's Academy of Civil Engineers in 2007. He is past president of the Southern California Contractors Association and was honored as its Contractor of the Year in 2006. He was also honored as a UMR Entrepreneur in 1994. He and his wife, **Suzanne**, are members of the Order of the Golden Shillelagh. Suzanne manages their charitable giving, which focuses on organizations in their community that support the health and education of young people and their families.

The Powells have contributed to S&T's civil engineering department for nearly four decades. They funded the **Doyle W. and Suzanne Powell Endowed Scholarship in Civil Engineering** to assist juniors and seniors and financially supported the rejuvenation of the civil engineering hydraulics lab through the Laboratory Equipment Enhancement Program. They also funded the **Doyle W. and Suzanne Powell Endowed Scholarship for Kappa Alpha Order** to assist S&T students in the Beta Alpha chapter.

"I learned how to think and how to work at Rolla," says Powell. "The university gave me a step up to have a better life than what I came from, and I've done that. I wanted to give back."

A PIPELINE TO POSSIBILITIES

Midstream Miner endows summer camp scholarships

For **Dennis Jaggi**, ME'70, the auto industry was a family affair. His father and uncle worked for Chevrolet in St. Louis, and he grew up tinkering with transmissions and engines.

As a high school senior, Jaggi applied to the General Motors Institute in Flint, Mich. He was accepted and planning to attend when GM transferred his father to Rolla as the area service manager for Chevrolet dealerships in southern Missouri.

"My dad encouraged me to apply to UMR because he thought I'd end up with a better degree — and I could live at home," says Jaggi, the first in his family to attend college. His sister, **Susan Jaggi Winscher**, Psyc'72, and her late husband, **Barry Winscher**, ME'71, later earned S&T degrees.

As a student, Jaggi didn't have much free time between his classes and full-time job at Kroger grocery store. He planned to use his mechanical engineering degree to work in auto manufacturing, but destiny and a mentor pointed him in a different direction.

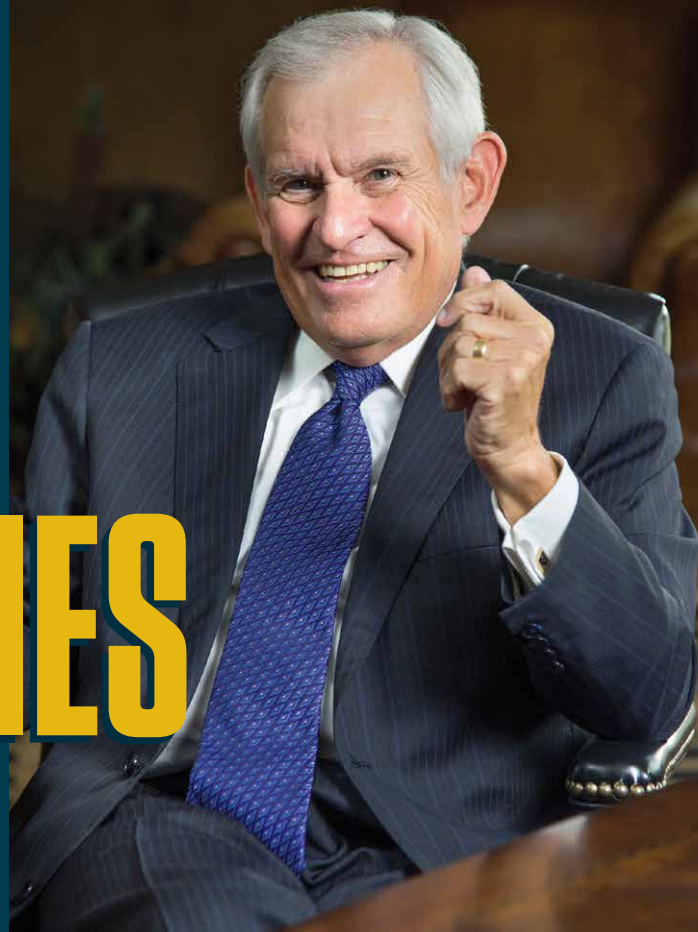
"My favorite professor, **Chuck Remington** (ME'49, MS ME'50), helped me get a summer job at Texas Eastern Transmission," says Jaggi. "That became a full-time job when I graduated, which was a good thing because I didn't get one offer from GM."

After graduation, the newlywed Jaggi and his wife, **Janet**, a Rolla native who worked in the mechanical engineering department office, moved to Shreveport, La., where Jaggi launched his career. He went on to spend 17 years with Delhi Gas Pipeline Co., a subsidiary of Texas Oil and Gas Corp., advancing from operations engineering into executive management.

When Koch Industries bought Delhi Pipeline in 1997, Jaggi joined Enogex, a subsidiary of OGE Energy Corp., as vice president and chief operating officer. Two years later, Enogex quadrupled in size with the acquisition of Transok, a complex integration process Jaggi oversaw.

Ready for a new challenge, Jaggi co-founded Flatrock Energy Partners in 2001.

"It was just me in the Oklahoma City office with Janet as my receptionist," he says.



"If I can help kids find their passion for science and engineering, I'm in."

Flatrock divided into three companies a few years later, and Jaggi with two partners took the helm of Flatrock Energy Advisors, a mergers-and-acquisitions consulting firm. Their success soon caught the attention of EnCap Investments, which approached them about a partnership. Since 2008, EnCap Flatrock Midstream has raised more than \$9 billion in capital.

Jaggi is now mostly retired, and the next generation of Jaggis, two of whom are S&T graduates, are industry leaders. His son, **Ryan**, ME'01, is executive vice president and chief operating officer of Brazos Midstream, and his daughter-in-law, **Cindy Rabbit Jaggi**, ChE'01, is chief operating officer of Black Mountain Sand. His son, **Greg**, is a police officer in Edmond, Okla.

A member of the Academy of Mechanical and Aerospace Engineers, Jaggi remains grateful for the doors his Rolla education opened. The Jaggis, members of the Order of the Golden Shillelagh, have given back to the academy and the Miner Alumni Association for many years and recently established a \$250,000 endowment for S&T summer camp scholarships.

"If I can help kids find their passion for science and engineering, I'm in," says Jaggi. "Many of them will go on to enroll at S&T, and anyone who graduates with a Rolla degree will do very well."



▲ Miner Alumni Association President and OGS member Chris Ramsay congratulates our newest Miner alumni on achieving this milestone.

OGS MEMBERS CELEBRATE GRADUATION FIESTA

Every commencement, the Miner Alumni Association honors the achievement of upcoming graduates with a celebration at Hasselmann Alumni House. Graduation Fiesta welcomes new graduates to the alumni association, giving them an opportunity to network with board members while they enjoy margaritas and tacos.

We were delighted that OGS members ended Philanthropy Week festivities by joining the party to encourage these emerging alumni. Miner Alumni Association President **Chris Ramsay**, MetE'83, MS MetE'85, toasted the future success of the graduates, along with fellow OGS members.



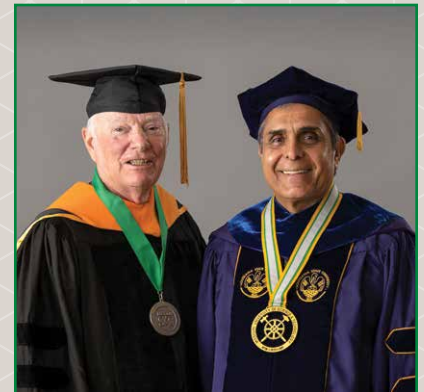
SUPPORTING STUDENT SUCCESS: JOHN AND SUSAN BERGER

Friends since childhood, OGS member **John Berger**, ME'68, and his late wife, **Susan**, enjoyed their time at Missouri S&T, where they attended dances and Sigma Pi fraternity events together. Throughout their marriage, Susan's encouragement was central to John's engineering achievements in environmental systems, air pollution control and energy recovery. She also played a prominent role in successfully guiding their four children through their college years.

The Bergers made many contributions to Missouri S&T, including gifts to the Academy of Mechanical and Aerospace Engineers, where John serves

on the board of directors, and to the Kummer Student Design Center. To memorialize his wife's passing in 2021, John recently made a naming gift to renovate mechanical and aerospace engineering's (MAE) academic advising offices. The department was the first on campus to enhance students' academic success through advising services, and their needs for a professional space had grown since the program began 11 years ago.

This spring the **John and Susan Berger MAE Academic Advising Suite** was completed. "I'm grateful to have the opportunity to contribute to student success through academic advising," says Berger. "And I know Susan would have felt the same."



LAUFER RECEIVES HONORARY DEGREE FROM S&T

OGS congratulates member **Wayne Laufer**, CE'67, who was awarded the doctor of engineering, honoris causa, during the Missouri S&T spring commencement ceremonies on May 13. He has been a member of the S&T Academy of Civil Engineers since 2011 and was named a 2021 **Alumni of Influence**.

Laufer began his 40-year career in the oil business as an engineer at Shell Oil and a decade later co-founded S.A. Holditch and Associates, now a part of Schlumberger, the world's largest offshore drilling company. In 1983 he co-founded Bois d'Arc Energy, a small gas and oil exploration company he steered into continued growth and took public on the New York Stock Exchange in 2005.

The company sold in 2008, and Laufer retired. He continues to invest in entrepreneurial ventures and oversees the Wayne Laufer Charitable Foundation with his wife, **Gayle**, who is also an OGS member.

The Laufers established the **Wayne and Gayle Laufer Endowed Chair in Energy**, one of the largest gifts for an endowed chair in Missouri S&T's history. They also established a graduate fellowship for energy research. Their family foundation awards scholarships to students wishing to pursue STEM degrees, and Laufer personally encourages the recipients to consider enrolling at S&T.

JAMES O. STOFFER

Teach. Discover. Give back.

When academic research and market success come together, it's something to commemorate. That's the intention of **James O. Stoffer**, Curators' Distinguished Professor emeritus of chemistry at Missouri S&T. Stoffer is giving royalties from the commercialization of his research team's patented work to the university.

With his \$550,000 gift and matching funds from the Kummer Inspiration Program, Stoffer has established a \$1.1 million endowment for the **James O. Stoffer Endowed Professorship in Polymer Chemistry**. The fund will also support the staff and equipment needed to advance the science behind everyday materials such as plastics, rubber, coatings and paints.

Stoffer's pioneering research to replace toxic chromates used as a corrosion inhibitor on military aircraft began in the 1990s at the University of Missouri-Rolla (now Missouri S&T). Working with the late **Thomas O'Keefe**, Curators' Distinguished Professor of metallurgical engineering, **Eric Morris**, PhD Chem'00, **Scott Hayes**, PhD Chem'05, and other graduate and post-doctoral student researchers, the team developed the first environmentally friendly alternative to toxic, chrome-based, anti-corrosion coatings. Their discoveries are patented and used extensively in the aerospace industry as a certified standard solution for aircraft coatings.

"It was a privilege to work with Tom O'Keefe on the metallurgical side of the research," says Stoffer.

"And in the end, we would not have had success without the superior work of my doctoral students, Eric Morris and Scott Hayes."

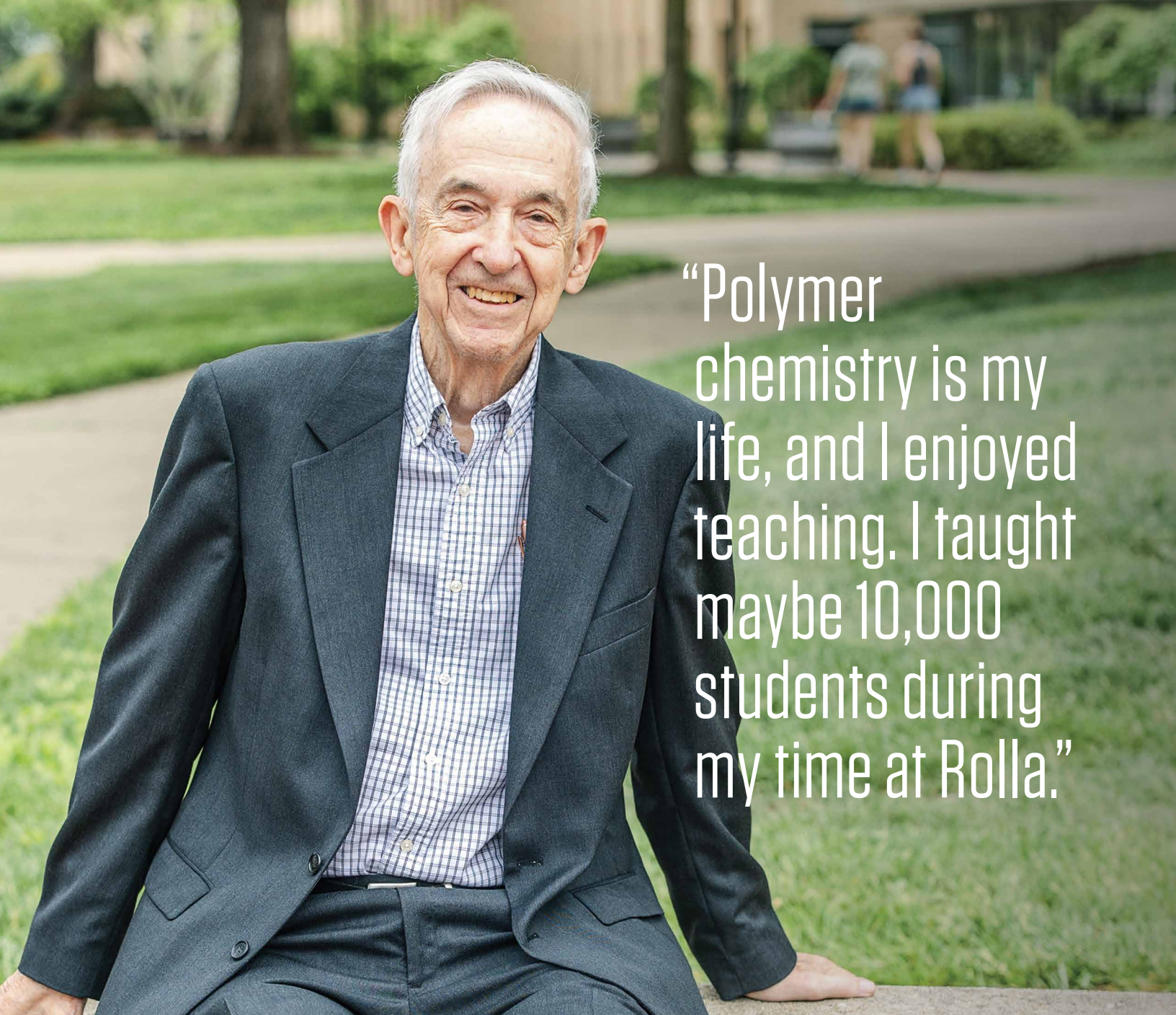
Paying it forward for polymer chemistry

Stoffer was instrumental to the development of the university's polymer chemistry program, one of the first in the United States to be accredited by the American Chemical Society. He taught organic and polymer chemistry to generations of young scholars and was a five-time recipient of the university's Outstanding Teacher Award and a three-time recipient of the Faculty Excellence Award.

"Polymer chemistry is my life, and I enjoyed teaching," says Stoffer. "I taught maybe 10,000 students during my time at Rolla." His interest in student success extended to advising 50 graduate students in chemistry, including 37 doctoral candidates, the largest number in the history of the department.

Among his proteges were **David Hsia**, MS Chem'72, co-founder of Watson Pharmaceuticals, now a part of Teva, a multi-billion-dollar global pharmaceutical company. Another was **Janet Kavandi**, MS Chem'82, a retired NASA astronaut who was inducted into the United States Astronaut Hall of Fame in 2019. Today Kavandi is president of Sierra Space Corp., a global manufacturer of spaceflight hardware.

Photo by Krista Grayson



“Polymer chemistry is my life, and I enjoyed teaching. I taught maybe 10,000 students during my time at Rolla.”

Stoffer joined the Rolla chemistry faculty in 1963 and was named professor emeritus in 2000. He earned a bachelor's degree in chemistry from Mount Union College in 1957 and a Ph.D. in chemistry from Purdue University in 1961 followed by a post-doctoral study at Cornell University.

He became a senior investigator with the Graduate Center for Materials Research in 1985 and served as the center's director from 1992 through 2001. He also directed the Paint Short Course Program from 1985 to 1987 and taught the Coatings Short Course to students in industry for 30 years.

Stoffer and his late wife of 59 years, Julia, have two children, Brenda Grogan, who studied mathematics at S&T and now teaches high school math in Heber Springs, Ark., and **James Stoffer Jr.**, PetE'83, MS Chem'88, past vice president of research and development at RPM Wood Finishes Group. The Stoffers founded and supported Kid Care America of Rolla, an after-school tutoring program serving children in grades K–6 who need help in English, mathematics

and self-care. Stoffer says the program has helped more than 20 children every year overcome obstacles to their success.

Stoffer also shared his abilities with the entire Rolla community where he served on the Rolla Municipal Utilities board of directors for 31 years, including 10 years as president. He additionally served on the Rolla Planning and Zoning Commission for 12 years.

Stoffer remarried, and he and his wife, **Rosie**, are members of the Order of the Golden Shillelagh. Their blended family includes seven grandchildren and 22 great-grandchildren. Stoffer wants to help all of them fund their college educations.

Over the years, Stoffer has contributed numerous gifts to Missouri S&T's chemistry department, including the sponsorship of a lecture series that is also funded with his royalties. “I've been successful taking research to market — blessed if you will,” says Stoffer.

With less than 8%* of academic research resulting in commercialized new products, Missouri S&T has been blessed as well. ■

*Data from AUTM, the Association of University Technology Transfer



Missouri University of Science and Technology
1100 N. Pine St.
Rolla, MO 65409

The background of the lower half of the poster is a photograph of the Chase Park Plaza in St. Louis. The building is a tall, white, Art Deco-style skyscraper with many windows. In the foreground, there are green trees and a red brick building. The sky is blue.

OGS WEEKEND

in *St. Louis*

SAVE THE DATE

June 6–8, 2024
The Chase Park Plaza

We can't wait to celebrate the shillelagh spirit with you at this iconic venue in the heart of the River City's Central West End.

Questions? Contact Sarah Jones at
jonesarah@mst.edu or 573-341-6359.