

# Lube 2024 Digital Exclusive

THE EUROPEAN LUBRICANTS INDUSTRY MAGAZINE

October 2024

The official journal of



Subscribe to Lube Magazine at  
[www.lube-media.com/subscribe](http://www.lube-media.com/subscribe)

**In conversation with...**

*Dr. Raj Shah, Director, Koehler Instrument Company*

# In conversation with...



**Dr. Raj Shah**, Director, Koehler Instrument Company

*Dr. Raj Shah is a Director at Koehler Instrument Company in New York, where he has worked for the last 28 years. He is an elected Fellow by his peers at IChemE, CMI, STLE, AIC, NLGI, INSTMC, Institute of Physics, The Energy Institute and The Royal Society of Chemistry. He earned his doctorate in Chemical Engineering from Pennsylvania State University and is a Fellow of The Chartered Management Institute, London.*

*Dr. Shah is also a Chartered Scientist with the Science Council, a Chartered Petroleum Engineer with the Energy Institute and a Chartered Engineer with the Engineering Council, UK. Dr. Shah was recently granted the honorific of "Eminent Engineer" with Tau Beta Pi, the largest engineering society in the USA. He is on the Advisory Board of Directors at the State University of New York, Farmingdale (Mechanical Technology and Engineering Management); Auburn University (Tribology); and the State University of New York, Stony Brook (Chemical Engineering/Materials Science and Engineering). An Adjunct Professor at Stony Brook University, in the Department of Materials Science and Chemical Engineering, Raj also has over 675 publications and has been active in the lubricant industry for over 3 decades.*

**Tell us a bit about your early years. Where/when were you born, and what is your family background?**

I was born in Mumbai where these even the cows had opinions on the best IPL cricket teams. We moved when I was little to London as my dad was doing his post doc at Imperial college and while he was studying there his professor won the Nobel Prize in Chemistry. That helped my dad to get whatever job he could wish for and my early years were filled with laughter, mischief, and a lot of "constructive" criticism

from my large family. Picture "My Big Fat Greek Wedding" with a side of curry, dal and samosas. Every family tended to be gathering felt like a cross between a comedy show and a debate club.

**What did you want to be growing up?**

I wanted to be a Nobel laureate in any field. I figured, why limit myself? If I aimed high enough, I could land anywhere great. Obviously, that is not happening as I have made no amazing inventions yet, but it was good to have a lofty goal. My childhood was spent dreaming of making groundbreaking discoveries—though my early "experiments" often resulted in minor explosions and my parents hiding the chemistry set.

**Where did you go to school, and what subjects did you choose and why?**

I was lucky enough to qualify to get into one of the finest universities for Chemical Engineering in Asia. The Institute of Chemical Technology in Mumbai, (called UDCT) when I joined. I chose this field gave me a great start in my career. I choose Chemical engineering as I grew up around it and because I was fascinated by the idea of creating something impactful from basic elements. Plus, I thought, "How hard can it be to mix a few chemicals?" Spoiler alert: It's pretty hard.

**What was your path to higher education?**

My path to higher education led me to a full ride for my PhD at The Pennsylvania State University, where I had the privilege of studying under the eminent Professor Klaus. It was like getting to play basketball with Michael Jordan every day—except with more equations and fewer slam dunks. I fell in love with the field of petroleum testing and tribology and never looked back.

***What was your first job? What did you like about it and what did you not?***

My first few short stint jobs were at local research laboratories and chemical plant, a place where the term “trial by fire” was taken quite literally. I loved the hands-on experience and the thrill of solving complex problems. What I didn’t love? The smell that clung to my clothes, making me persona non grata on public transport, but I got to put a lot of what I had learned in graduate school into practice

***How has career mapping led to where you are now?***

My career path was anything but linear. I have been now at Koehler Instrument Company, (for almost 30 years back) and we are now one of the leaders in manufacturing analytical lab equipment for lubricants and grease. The company grew alongside my career, and I learned from incredible mentors and colleagues. We manufacture our cutting-edge products right here in Long Island, New York. Along the way, I had a great boss and owner who supported my growth, and a spouse who was incredibly supportive, though always challenged me instinctually (she was a much better student than I was in graduate school and reminds me of that often) , and this has helped at times keep me humble . Many mentors in the industry also guided me, ensuring I never strayed too far off course—at least, not without a safety net.

***Are you a lifer? If yes, how do you see your career panning out over the next 20/30/40 years?***

Absolutely, I’m a lifer. I see myself continuing to innovate and push the boundaries of lubrication technology and tribology. We have a full machine shop here in Long Island and incredible engineers as well, so who knows, maybe one day I’ll finally invent a gizmo in my spare time that can make breakfast in bed. Over the next few decades, I hope to mentor the next generation of scientists and I enjoy doing that.

***How has the industry changed since you started?***

The industry has transformed, not at the pace of information technology but it still one does see changes as years go by. When I started, we were working with basic lubricants, similar additive packages. Now, the industry developing high-tech, environmentally-friendly solutions (possibly even for EV’s and other such technology) that with AI entering into the area of Lubrication technology there will soon be things that our industry can achieve that

would make my younger self’s head spin. The pace of innovation in general will soon be staggering, especially as we adopt more AI in years to come in our field, and it’s will be exciting to ride that wave.

***What do you like about the industry? And what would you change if you could?***

I love the comradery and friendships one can develop in this industry. While there are constant challenge and companies seem to have never-ending quest for improvement, when push comes to shove, most folks get together to solve issues and work well even form competing companies. We have incredible people who work in this field. If I could change one thing, I’d maybe suggest at times to simplify the regulatory landscape especially in Europe. Sometimes it could feel like trying to navigate a maze while blindfolded and wearing mittens.

***What challenges do you think the industry faces? In your role and as a whole?***

The biggest challenge that will face us is balancing rapid technological advancement with stringent environmental regulations. It’s might as the decade turns feel like our industry may be asked to run a marathon while juggling flaming torches. Our company’s role would be to keeping implying test techniques and develop new test methods for changing fluids while ensuring our innovations are not only groundbreaking but also commercially viable, which can be a tightrope walk.

***How do you balance work life with home life?***

Balance? That’s a mythical concept I’m still searching for. I try to carve out quality time with my son despite the hectic schedule. We live near beautiful beaches to water plays a key role in our balance of work and play

***What are your hobbies?***

I enjoy kayaking and reading and mobile photography. Kayaking helps me find peace on the water, reading takes me to different worlds, and photography lets me capture moments that make life beautiful. Plus, I occasionally cook, but that often turns into another chemistry experiment.

***Where do you like to holiday?***

I love holidaying anywhere with a beach. The sound of waves crashing is like nature’s lullaby, reminding me to relax. Plus, who doesn’t love a good beach volleyball game?

**What is your perfect weekend?**

My perfect weekend involves a mix of adventure and relaxation. A morning spent kayaking, an afternoon lost in a good book, and an evening with good friends and drinks, probably ending with a barbecue where I inevitably burn something.

**If you could meet anyone famous (dead or alive) who would that be and why?**

I'd love to meet Mahatma Gandhi. His wisdom, humility, and leadership continue to inspire millions, including myself. Plus, I'd love to ask him how he managed to stay so calm and composed most of the time.

**One of your favourite quotes?**

"Success is not final, failure is not fatal: It is the courage to continue that counts." – Winston Churchill. Because in both science and life, it's all about picking yourself up after every experiment that doesn't quite go as planned.

[koehlerinstrument.com](http://koehlerinstrument.com)

**In conversation  
with...**



**Interested in being  
interviewed? Email  
[editor@ukla.org.uk](mailto:editor@ukla.org.uk)**

the official  online directory

**ELID**

**The Directory  
for the  
Global  
Lubricants  
Industry**

For more information visit  
[www.lube-media.com/elid](http://www.lube-media.com/elid)  
or contact  
[laurie@ukla.org.uk](mailto:laurie@ukla.org.uk)

