

Barracuda Virtual Reactor Users' Conference 2024

June 19 -21, 2024 | W Chicago - Lakeshore

Welcome and Thank You for Attending!

Connect – Meet Barracuda Virtual Reactor users from around the world


Learn – Presentations about how Virtual Reactor is being used to solve problems in a wide range of industries

Participate – Join one of our hands-on training sessions on Friday, sessions available for both new and experienced users



Welcome

Thank you for attending the Barracuda Virtual Reactor Users' Conference 2024! Over the three days of the conference, you'll have opportunities to learn how others are using Virtual Reactor, network with Barracuda users and partners from around the globe, and meet with CPFDF staff in-person. Our program includes presentations from industry, academia, technology providers, and CPFDF's development team. Thank you for joining us in Chicago!

Share with #BVRUC 

Agenda

Wednesday, June 19

- 3:15 PM Registration
- 3:45 PM Welcome
Sam Clark, CPFDF Software
- 4:00 PM Chevron Pascagoula FCC Regenerator Optimization via Modeling
Robert Montgomery, Chevron and Peter Blaser, CPFDF Software
- 4:30 PM Computational Particle Fluid Dynamics 3D Simulation of the Sorption-Enhanced Steam Methane Reforming Process in a Dual Fluidized Bed
Federico Monterosso, OMIQ on behalf of ENEA, NextChem, and SNAM
- 5:00 PM CPFDF Team Introduction
Rajat Barua, CPFDF Software
- 5:15 PM Adjourn
- 5:30 PM Reception

Thursday, June 20

- 8:00 AM Breakfast and Registration
- 9:00 AM Enhancing Fluidization Design Using Computational Methods
John Zhizhong Ding, Shell Global Solutions
- 9:30 AM Modeling FCCU: Success and Challenges
Raj Singh, Technip Energies
- 10:00 AM Improving the Hydrodynamics and Heat Transfer in Crude Oil Catalytic Cracking via a Novel Catalyst Formulation
Isa Al Aslani, King Abdullah University of Science and Technology
- 10:30 AM Break
- 10:55 AM Successful Process Decarbonization in Cement Industry with Barracuda Virtual Reactor Computational Engineering
Martin Weng, aixprocess
- 11:25 AM CEMEX Rudniki Digital Design Twins Modeler (RDDT)
Jorge Pablo Garcia, CEMEX
- 11:55 AM Altair's Complementary Solutions for Modeling Particle-Fluid Systems
Jerrin Job Sibychan, Altair
- 12:10 PM Lunch
- 1:10 PM Accelerating Advanced CFD Simulation through High-Performance Computing on Rescale
Madhu Vellakal, Rescale
- 1:25 PM CFD Analysis of Sand and Gravel Filling in Seabed Socket for Wind Turbine Tower
Frederik Zafiryadis, Aerotak
- 1:55 PM Fluidization's Role in the Scale-Up and Commercialization of Sustainability and Decarbonization Technologies
S. B. Reddy Karri, PSRI
- 2:25 PM Modeling CFP Catalyst Regeneration in BFCC Units
Bruce Adkins, Oak Ridge National Laboratory in collaboration with NETL

- 2:55 PM Break
- 3:20 PM Simulation of a Novel Clean Hydrogen Process Using Virtual Reactor's New Vapor-Liquid-Solid Capabilities
Ahmed Mahmoud, Ally Power and Shashank Karra, CPFDF Software
- 3:50 PM CPFDF Software Updates: Product, Support, R&D and Q&A
Sam Clark, Andrew Larson, and James Parker, CPFDF Software
- 5:00 PM Adjourn
- 7:00 PM Chicago River Dinner Cruise

Friday, June 21

- 8:00 AM Breakfast
- 9:00 AM Breakout A: Introductory Training Workshop in Focus 2
Rosemary Clark and Tanner Stelmach, CPFDF Software
- Breakout B: Advanced Training Workshop in Altitude
Sam Clark and Pramod Bangalore, CPFDF Software
Scott Fowler, Tecplot, Inc.
- Breakout C: In-Person Meetings with CPFDF by Appointment
- 10:20 AM Break
- 10:40 AM Breakout A: Introductory Training Workshop in Focus 2
Rosemary Clark and Tanner Stelmach, CPFDF Software
- Breakout B: Advanced Training Workshop in Altitude
Sam Clark and Pramod Bangalore, CPFDF Software
Scott Fowler, Tecplot, Inc.
- Breakout C: In-Person Meetings with CPFDF by Appointment
- 12:00 PM Lunch and Adjourn

Events

Wednesday Night Reception

Join us for drinks and appetizers on Wednesday night! The reception will be from 5:30 to 7:00 pm on the 6th floor of the W Chicago - Lakeshore.

Navy Pier sets off fireworks at 9:00 pm. Enjoy them from the hotel or at the pier.



Thursday Night Dinner Cruise

CPFD invites you to join us for a dinner cruise on Thursday 7 to 10 pm for an evening of networking, wonderful Chicago views, and great food! Board near NBC Tower at 455 N Cityfront Plaza Dr, about half a mile from the W Chicago - Lakeshore. Dress attire is casual. Scan the QR code for a brochure with information about all of the great architecture we will see as well as detailed directions/map to the boarding location and nearby parking options if needed.



Breakout Sessions

Friday morning is your opportunity to actively participate, learn more about Barracuda Virtual Reactor, and connect with CPFD Software team members in-person. We encourage all attendees to take advantage of the breakout session options.

If you wish to attend one of the training workshops, bring a laptop to participate in the hands-on exercises. We recommend using a 3-button mouse for ease of interacting with the Virtual Reactor and Tecplot for Barracuda GUIs.

Thanks to our training workshop sponsors for their contributions!



CPFD is grateful to Rescale for providing cloud-based Linux Workstations for attendees to use during the workshop. The Rescale Workstations are GPU-accelerated and allow for high-performance computing resources to be accessed directly from your web browser.

We are pleased to welcome Scott Fowler from Tecplot, Inc., who is co-leading the Advanced Training Workshop to present several post-processing topics that Virtual Reactor users are sure to find valuable for increasing their efficiency and effectiveness.

CPFD also thanks PSRI for providing A/V support and other information technology assistance to help make these training workshops a success.

Breakout A: Introductory Training Workshop



Location: Focus 2 meeting room on the 7th Floor

Instructors: Rosemary Clark and Tanner Stelmach, CPFD Software

If you are new to Barracuda Virtual Reactor and have never attended our New User Training Class, we encourage you to attend this Introductory Training Workshop. The workshop will include an Introduction to Barracuda Virtual Reactor presentation and a hands-on training example where you will set up a basic Virtual Reactor simulation from start to finish.

Breakout B: Advanced Training Workshop

Location: Altitude meeting room on the 33rd Floor

Instructors: Sam Clark and Pramod Bangalore, CPFD, and Scott Fowler, Tecplot, Inc.

For current users of Barracuda Virtual Reactor who have previously attended our New User Training Class, we invite you to join us for this Advanced Training Workshop. We will highlight important new features from the past several releases of Virtual Reactor, and provide opportunities for hands-on exploration of Barracuda's latest developments.

Additional post-processing training will be led by Scott Fowler from Tecplot, Inc. Topics covered will include advanced features in Tecplot for Barracuda, using PyTecplot for custom post-processing, and automation of analysis tasks.



Breakout C: In-Person Meetings with CPFD by Appointment

Location: Arranged on a case-by-case basis

CPFD Software team members are available to meet in person on Friday morning by appointment. We want to hear from you! Tell us about your successes using Virtual Reactor, let us know how we can help, and share any feature requests you have to make Barracuda even more useful and valuable for your work.

To schedule a private meeting, sign up at the registration desk in the Altitude meeting room (33rd floor). Meeting times and locations will be determined based on availability on a first come, first served basis.



500 Hours of Metered Licensing for Attendees

Redeem your certificate for 500 hours of metered licensing after the conference!



BARRACUDA VIRTUAL REACTOR USERS' CONFERENCE 2024

Thank you for attending the Barracuda Virtual Reactor Users' Conference 2024. This card entitles bearer to 500 hours of RLMCloud metered licenses for Barracuda Virtual Reactor. Contact licensing@cpfd-software.com to redeem this offer.*

500 HOUR METERED LICENSE

Certificate #024-

Authorized by: _____

* Offer valid for current customers only. Certificate and hours expire September 30, 2024 and require at least one concurrent base license. New customers may substitute this certificate for training and trial licensing. Non-transferable. No cash value. Additional conditions apply.



CPFD Software 13501 Katy Freeway, Suite 3505, Houston, TX 77079 USA www.cpfd-software.com +1.713.429.1252



Thanks to Our Partners and Sponsors!

CPFD is grateful for the support and collaboration of our partners and sponsors

