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TALKS WITH DR. ROLF RABENSEIFNER

FACT

DR. ROLF RABENSEIFNER,
MPI 'HEAVYWEIGHT' HAS
RECENTLY RETIRED.

Of course, we know you as a trainer and are aware of your role in the HPC and MPI landscape, but for readers who are not yet familiar with you, could you briefly introduce yourself and describe your work?

I work at the High-Performance Computing Center Stuttgart, the HLRS, where I taught many courses on MPI and OpenMP. Additionally, I set up the training center for academic HPC courses.

In 1996 I joined the MPI Forum, the standardization body for MPI, and since December 2007, I'm also in the Steering Committee, and back then technically responsible for the MPI-2.1 standard.

Since 1999 I was also invited externally to give courses and tutorials - for example at SC, the Supercomputing Conference.

You have been in HPC for 25 years? Why did you stick to this domain?

My work was rich in variety. On the one hand, I was active in research and on the other hand in service through teaching courses. I was given a permanent employment contract relatively early in my career and later I also had the opportunity to work externally on a freelance basis.

It is often more efficient if the trainer travels and thus many course participants are already on-site. Over the years, this has created a nice network with Dresden, Jülich, Garching, Hamburg, CSCS and ETH in Switzerland, Leuven in Belgium, Amsterdam, Vienna, Mainz, Frankfurt, and Stuttgart as the center. It was also exciting to collaborate with colleagues from other centers for our tutorials first at Euro-PAR and then at the SC conferences and later at ISC.

It was more work, but also interesting travel and not just permanent unpaid overtime. I had a lot of creative freedom and enjoyed my work.

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What were the challenges when you started out and how did you address these?

The real challenges were traveling every 6 weeks to the MPI forum in Chicago, building a house - we renovated a 100 years old house together with friends, having then young children, and managing all this at the same time. Luckily, I had great support from my wife, who also worked part-time, but still kept everything together. Additionally, I was grateful for the invitation to a 3-month research stay by Prof. Nagel in Dresden, where I was able to complete important parts of my Ph.D., in addition to three publications.

What are the current challenges?

One of the difficulties, especially for the next generation, will be dealing with more side business whilst not losing sight of the core parts of the business. How many hours are really available for research and for teaching - and how many, on the other hand, are absorbed by overhead, for new web presences, implementing policies, compiling statistics and writing reports, and many project meetings. Not saying that those are all unnecessary, however balancing them out is a major challenge.

IMAGE CAPTION

1. Dr. Rolf Rabenseifner at the colloquium organised by HLRS in his honour in May 2022
2. Dr. Rolf Rabenseifner

Your "train the trainer" program is like a quality label which is also useful with respect to funding agencies. What gave you the idea to start the program?

Oh, I never thought of it as a seal of quality. I just wanted to give back something that I had been given myself. I started with the MPI-1 course from the EPCC in Scotland. They provided the perfect course for everyone. And I then added MPI-2, MPI-3, and MPI-4 over the years.

Unfortunately, I had to experience that participants came to me, who had already been taught MPI elsewhere but had not even learned the concept of nonblocking interfaces. This is central to MPI and was already included in the EPCC's MPI-1 course! The ability to teach this had been partially lost again.

And of the PTCs, the PRACE Training Centers in Europe, I observed that many of them tried to buy courses instead of developing trainers and trainings themselves. But you can't just duplicate trainers.

So, I thought it would be nice to not only pass on the knowledge to future trainers in other countries via this "Train the Trainer" program but also give them the tools, i.e., the often animated slides as original ppt and not just as PDF. I also wanted to dampen the jump into the deep end by having them once or twice volunteer when the course is given and learning how to adequately support the participants during the exercises. At the same time, it ensures that future trainers also have a firm grasp of the content.



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Dr. Rabenseifner about his 'Train the trainer program'

If you look back at your career what do you find most satisfying?

Very satisfying were the many positive feedbacks from my course participants. Especially – even though this happened only very rarely – I met participants again somewhere after many years and they told me that my course was a central starting point for their professional development.



We have the impression that you inspired a number of people. How do you look at this?

Maybe, but gladly I worked in a field with many inspiring colleagues!



Rolf Rabenseifner has been a great collaborator for us at SURF for the development, from our participation in the MOOC course for PRACE to our participation in the train-the-trainers program for the MPI course at HLRs. His thoroughness and precision, the care in the curation and amendment of materials has definitely been valuable to implement good practices in our training team in the Netherlands.

Dr. Carlos Teijeiro Barjas, Advisor Supercomputing of SURF, the collaborative organisation for IT in Dutch education and research

Now that you have retired, will you continue to work on certain things, and if so, would you shift your focus to certain topics?

Yes, I will remain - as long as I am well - still active as a trainer and also, for example, in the MPI Forum. But I have completely handed over the organization of training and the related projects to my successor and my colleagues.

Are there still things you would like to accomplish?

Yes, I hope that in the coming years I can improve my work-life balance and can enjoy more free time with my wife.



IMAGE CAPTION

3. Dr. Rolf Rabenseifner taught many courses on MPI and OpenMP at HLRs and other locations, here teaching MPI+X @ VSC Vienna in 2016

4. Dr. Rolf Rabenseifner together with his wife Rose