

## FREDERIQUE VALLEE

### Candidate for IEEE Region 8 Vice Chair Member Activities



#### BIOGRAPHY

Frédérique Vallée is agrégée of mathematics (1978 – highest degree of teaching in France) and have obtained a PhD in statistics (1981 at UPMC one of the biggest French university). After 4 years as mathematics teacher (1978-1981) and 5 years within Thales as reliability engineer (1081 -1986), she founded in 1989 her own company MATHIX, that became ALL4TEC in 2006.

For 10 years (2006-2016) she has been in charge of consultancy, R&D and support activities within ALL4TEC. She was the expert technical interface for the main ALL4TEC clients. She also was in charge of numerous French or European research projects for improving the security and reliability of complex systems during their design or validation phases. She is now acting as an independent consultant in her own company (F&CO).

She is member of French engineering societies working on these topics (AFIS – Association Française d'Ingénierie Système, IMDR – Institut de Maîtrise des Risques) and she is recognized as an expert for the European Commission. She teaches courses in numerous engineering schools and training institutes (Polytechnique, Centrale-Supelec, ENSTA, ISTIA). She has written a lot of papers and is co-author of three books.

#### IEEE ACTIVITIES

##### REGIONS:

Voting member of the R8 Committee representing the IEEE France Section (Section Chair) in the Region 8 meetings (two meeting per year) for 3 years (2017-2019)

Region 8 Action for Industry, corresponding member (2020- )

##### SECTIONS/CHAPTERS:

France Section, **Secretary** (1990-2016)

France Section, **Chair** (2017-2019)

France Section, **Student activities Chair** (1982-1989)

Reliability Chapter, **President** (2003-2017)

##### CONFERENCES:

RTSI 2018 Steering committee

##### AWARDS:

IEEE Third Millennium Award for outstanding achievements and contributions (2000)

France Section Award for contributions to the Section (2007)

##### OTHER: (Society Memberships)

Computer society

Reliability society

WIE

IEEE Systems Journal (ISJ) **Associate Editor** (2020- )

#### QUALIFICATIONS

Her main qualification is her sound knowledge of the large spectrum of IEEE activities and its technical and managerial organization due to her IEEE experience (30 years of volunteering).

More particularly for Membership Development, she has been able to notice the improvement of MD tools especially when SAMIEE was developed in order to replace “paper lists” and then when it has been replaced by IEEE OU analytics in Vtools. IEEE OU analytics helps our volunteers to perform their jobs more efficiently. It brings very useful statistics about Members and Affiliates by Region, Section and Subsection, contact information, grade, gender, HKN status. It provides an overview of attending students (all grades) by Section and School. Information about memberships, subscriptions, and Technical Committee participations are also available.

As an engineer, she was involved in research projects and is therefore able to understand numerous technical concepts even when they are not directly connected to her expertise area. She considers that this is important to correctly embrace all the Region activities.

She also has more than 10 years of experience in research projects management which brings together researchers and industrialists and thinks that it is useful to work on better industrial involvement into IEEE.

Another skill is her knowledge of human management and administrative aspects (she was COB of her company) in order to correctly handle the role of Vice Chair.

## **MAJOR ACCOMPLISHMENTS**

At the beginning of her IEEE enrolment, in 1982, she has travelled to numerous French engineering schools and universities in order to introduce the IEEE to the student and to help create student branches.

Then, from 1990 to 2016, she has accomplished all the activity allocated to the Section Secretary. This was also the opportunity for her to better understand the large spectrum of IEEE activities and its technical and managerial organization.

In parallel in 2003 she founded and was the First Chairman the French reliability chapter (REL07). She has been in charge of its technical activities and reporting until 2017.

In 2017 she was elected France Section chair and for 3 years she has been managing all French IEEE activities and the Section links with R8. During her mandate the Section number of members has been maintained and in 2017 the France Section reached Region 8 Retention Goal, 3 new chapters have been created (Sensor Council, Broadcast Technology, Systems Council), 2 new student branches have been created (ISAE-SUPAERO and Ecole Polytechnique 'X'), a SIGHT has been initiated. A special price has been set up to reward the best Student Branch.

The Section has consolidated its Memorandums of Understanding (MoU) between IEEE and the French SEE (Société des Electriciens et Electroniciens) for enabling the co-organization of common scientific and social events between the two institutions.

On September 29, 2017 she organized a ceremony at Déolen in Brittany, France that celebrated the recognition of the IEEE milestone celebrating the anniversary of the inauguration of the submarine telegraph cable known as Le Direct that provided communication between Europe and North America without intermediate relaying.

She carried out a maximum of actions/activities that are given in the Section Vitality Checklist in order to get to a vital and successful Section. This was also for her the occasion to better know the R8 board and all Section involved in R8 vitality. She began there her involvement in Action for Industry initiative (initiation of a new concept and organization of 5 industrial workshops) where she is now a corresponding member.

## **POSITION STATEMENT**

Her first statement is to work in continuity of the huge work already undertaken by the Past Vice Chairs.

Those last ten years we are facing declining of IEEE membership, both at R8 and global levels. This is partially due to circumstances out of our control, but there are still many things we can and should do to revert this trend.

Region 8 poses an additional challenge to this approach, given the diverse cultural and social circumstances of its members, so it is even more important to work coordinately and complementarily to understand and serve the members.

If elected she will first concentrate on Students and Young Professionals members, because they are the future of IEEE. She will try to highlight to them the value of IEEE membership. There are as many experiences as members, and it is not easy to find the best one that could convince Students and YPs, but with the tools that nowadays exist we can improve what is done today.

She will also think at a better industrial involvement in echo to her work in the Action for Industry initiative.

For other members, her plan is to foster members' awareness of IEEE activities and existing benefits and develop retention strategies. We must promote member grade elevation and support and provide recognition of IEEE volunteers. In parallel we must be certain that all R8 IEEE organizational units are well informed about our actions.

In order to do this, she will have to work closely with other volunteers, both at the Region and at the MGA level. She will make every effort to ensure that the rest of the R8 OpCom understand all membership needs and requirements.