Leopoldina
Nationale Akademie
der Wissenschaften

Curriculum Vitae
Professor Dr Susanne von Caemmerer

Image: ARC Centre of Excellence for Translational Photosynthesis

Name: **Susanne von Caemmerer**
Date of birth: **25 June 1953**

Research Priorities: Plant physiology, photosynthesis, carbon absorption, CO_2 assimilation

Susanne von Caemmerer is a plant physiologist whose work focuses on photosynthesis and models thereof. Her research priorities cover the carbon absorption of plants, including the biochemistry of carbon assimilation and diffusion.

Academic and Professional Career

since 2005	Professor of Molecular Plant Physiology, Research School of Biology at Australian National University, Canberra, Australia
	Centre Deputy Director and Co-Leader, Research Program 1, ARC Centre of Excellence for Transnational Photosynthesis, Australian National University, Canberra, Australia
1994 - 2005	Fellow, Australian National University, Canberra, Australia
1983 - 1994	Research Fellow, Australian National University, Canberra, Australia
1982 - 1983	Postdoctoral Fellow, Carnegie Institute Washington, Stanford, USA
1981	PhD in Plant Physiology, Australian National University, Canberra, Australia
1976	Bachelor's Degree in Mathematics, Australian National University, Canberra, Australia

Project Coordination, Membership in Collaborative Research Projects

Principal Investigator, C4 Rice Consortium, "C4 Rice Center, International Rice Research Institute", Los Baños, Laguna, Philippines

2014 - 2016 Secondary Investigator, “Thermal acclimation of leaf mesophyll conductance”, Australian Research Council

2014 - 2016 Primary Investigator, “Enhancing and manipulating C4 Photosynthesis”, Australian Research Council

2011 - 2013 Primary Investigator, “Using Arabidopsis mutants to discover the role of guard cell chloroplast in the stomatal response to light”, Australian Research Council

2011 - 2013 Primary Investigator, “Quantifying C18OO discrimination and CO_2 diffusion in C3 and C4 leaves”, Australian Research Council

2010 - 2013 Secondary Investigator, “Improving plant productivity and human health using next generation biotechnology approaches”, Australian Research Council

2008 - 2010 Primary Investigator, “The metabolic and enzymatic regulation of C4 photosynthesis and its impact on photosynthetic productivity”, Australian Research Council

2007 - 2009 Secondary Investigator, “What limits CO_2 diffusion inside leaves? Dissecting the diffusion path with Arabidopsis mutants”, Australian Research Council

2004 - 2006 Primary Investigator, “Stomatal Function in Transgenic Plants with Altered Guard Cell Metabolism”, Australian Research Council

Honours and Awarded Memberships

2021 Suzanne Cory Medal, Australian Academy of Science, Australia

2017 Charles Reid Barnes Life Membership Award, American Society of Plant Biologists, USA

since 2017 Member, Royal Society, UK

2016 Peter Baume Award, Australian National University, Australia

2014 Charles F. Kettering Award, American Society of Plant Biologists, USA

since 2013 Corresponding Member, American Society of Plant Biologists, USA

since 2006 Member, German National Academy of Sciences Leopoldina, Germany

2006 Member, Australian Academy of Science, Australia

Member, Australian Society of Plant Scientists

Research Priorities

Susanne von Caemmerer is a plant physiologist whose work focuses on photosynthesis and models thereof. Her research priorities cover the carbon absorption of plants, including the biochemistry of carbon assimilation and diffusion.

Susanne von Caemmerer has been recognised for her many important contributions to the field of photosynthesis. The focus of her work lies on carbon diffusion and assimilation in leaves. She developed mathematical models for quantitative descriptions of CO_2 assimilation which have since become regularly used all over the world to calculate global CO_2 assimilation.

In her work, she also uses the molecular biology method of antisense technology. This allows her to create transgeneous plants in which the concentration of different photosynthetic enzymes is reduced in order to decode the regulation of both C3 and C4 photosynthesis.