



## Transformative Roles of Science in Society: From Emerging Basic Science toward Solutions for People's Wellbeing



### Introduction

The 2018 PAS plenary is guided by the ideas that

- basic sciences remain fundamental for generating a valid and evidence based model of the world
- sciences become ever more interconnected across disciplines, including the humanities
- scientists and science policy makers need to engage with society to maintain (foster) trust in science and to counter the spread of statements that are not based on scientific insights (fake news).

In the 2018 Plenary we attempt to identify emerging insights from basic science, and – where appropriate – connect new insights with visions for problem-solving strategies and related research. As Goethe said: Knowing is not enough, you must apply; willing is not enough; you must do.

We note that trust in science may have declined. Loss of trust in science will lead to reduced support by society and jeopardizes the transformative impact of science. Our Academy is particularly sensitive to any such tendencies and therefore seeks the dialogue with science policy leaders at the Plenary Session 2018. This Plenary has the following objectives:

- To identify groundbreaking developments in the main disciplines of basic science. These shall be communicated by speakers in ways understandable by participants from different science disciplines.
- To identify evidence based and sustainable problem-solving strategies and related research for people's wellbeing, poverty reduction and humanity's current problems of environmental destructions and conflicts.
- To identify and share approaches on how to strengthen societies' trust in science. Causes of possibly growing mistrust in science are addressed and opportunities to enhance trust in science identified, including science education and communication. In that context we shall also embrace the theme, how to foster fruitful relations between sciences and religions.