

Your Excellencies, Rector Badran Al-Omar, Vice Rector Ahmed Al-Amri, dear Speakers of our Symposium, dear Colleagues, Ladies and Gentlemen!

I would like – also on behalf of all my colleagues contributing to the creation of the new laboratory – cordially thank you for being with us today and rendering this event memorable with your presence!

Science is wonderful. It provides a common language for people from disparate cultural environments. Even though they may have differing opinions about many aspects of life and society, whenever they immerse in physics, their arguments must be consistent with the laws of nature. These laws are supposed to be the same everywhere, resulting in the same gorgeous green color at 514-nm wavelength from an argon laser anywhere in the world, either in Munich, Ottawa, Paris, Riyadh, or outside our planet. Science is wonderful. It creates friendships. Combined with a discussion culture underlying well-defined rules, these friendships offer a unique chance for exchanging differing opinions about topics even beyond science and develop an ability to understand each other's concerns and constructive criticism. *Science is much more than the source of new knowledge.*

Having said that, it is the search for new knowledge (preferably with far-reaching impact) that drives us, scientists – of whatever colour or religion – in the pursuit of our goals, often reachable only over extended time scales. The creation of the Attosecond Science Laboratory, the first of its kind in the Arab world, was such a goal. It required a great deal of efforts over several years, primarily by Professor Abdallah Azzeer, without whom the dream about a laboratory that ranks among the best in the world of ultrafast science could not have come true. **Dear Abdallah, next generations of young scientists in the Kingdom and beyond owe you a lot and so do all of us having the privilege of being allowed to learn from your unparalleled persistence and single-mindedness!**

We are indebted to Rector Badran Alomar and Vice Rector Ahmed Al-Amri, whose persistent support, encouragement and – most importantly – continued trust in the scientists in charge of the project even at times when progress was modest has been a decisive factor, too. Cordial thanks go to their counterparts at the Ludwig-Maximilians-University, Rector Bernd Huber and Vice Rector Sigmund Stintzing, as well as the former dean of the Faculty of Physics, Prof. Axel Schenzle for their support that allowed us to build the Laboratory of Extreme Photonics in Munich, which has been instrumental in the preparation of ASL's scientific instrumentation. Last but not least, as always in science, the technical work in preparing and commissioning the state-of-the-art infrastructure of ASL has been performed by several young colleagues, whose contributions are gratefully acknowledged.

Our mission is far from being completed. ASL may only be a first step. Its current instrumentation furnishes researchers of King Saud University and their collaborators with tools available only in a few leading laser research centres worldwide. They provide access to phenomena that were considered immeasurable only a few years ago, fundamental processes relevant to life and death, as well as to advancing signal processing to its ultimate limit. As usual in basic science, results from ASL are likely to have impacts only on the long run. But we do hope for an important short-term return: students of KSU becoming infected with our passion for research at the frontiers of science and technology.

ASL is only a first step. Whilst our young colleagues zoom in on hyperfast electrons, we are preparing a new scientific endeavour of much bigger scale. Ultrafast laser techniques offer more than catching electrons. *They may also constitute the key to detect cancer at its early stage*, way before it becomes a life-threatening disease as it nowadays still does millionfold every year. To demonstrate this capability, we have recently extended our initial collaboration of laser physicists, with molecular biologists, bioinformaticians, computer scientists and oncologists from both universities for the development and application of a novel laser-based technology for identifying molecules from cancer cells in the blood and breath of patients by means of broadband infrared spectroscopy. If successful, the approach may revolutionize cancer screening and therapy monitoring. Is there any better argument for continuing our collaboration than the joint effort to make this dream come true?