Nobel laureate exults the ‘butchers’ blocking progress in nanoscience. Paul Jump reports

“Blind butchers” in vice-chancellors’ offices are undermining nanosciences’ potential to deliver “paradigm shifts” in physics, biology and engineering, according to Nobel laureate Sir Harry Kroto.

Sir Harry, who was the co-winner of the 1996 Nobel Prize for Chemistry, remarks in response to a list of the scientists of the past decade, measured by the average citation count of their papers. The analysis (below) is based on Thomson Reuters’ Essential Science Indicators.

“A survey of the listed scientists’ websites reveals that 78 cite nanoscience and nanotechnology as either a main or partial research interest,” he said. “Sixty of the 100 top chemists over the past decade also work at least partially in the nano field, according to an analysis published earlier this month by THE.

Sir Harry said he was not surprised by the findings because nanoscience, which he defined as the “molecular-scale technology of more and more complex systems with advanced functions at nano- and even molecular dimensions” was in its 21st-century advanced chemical form. But he said precautions should be taken not to ignore the epochal advances in engineering, physics and biology which were being hampered by the traditional academic boundaries dividing the subjects.

He said cutting-edge areas such as nanobiology and nanophysics were “more chemistry than anything else”, but were “not getting the credit they deserve.” Consequently, work in the fields was often “limited in quality” due to a lack of chemical know-how in other subject areas.

“This is one major reason for the perspective of vice-chancellors who don’t recognize it as a key area,” he said. “I call it death by a thousand cuts, inflicted by blind butchers who cannot see that we need more expert chemists than ever before.”

He added that “small bands” was undermining the UK’s ability to contribute to advances in nanotechnology, which would be needed to respond to the “nowhere rapidly” without “delicate understanding of molecular behaviour and construction”. But he acknowledged that things were “not much better” in the US.

He said that although she would not officially a professor of physics, she regarded herself as a materials scientist. But she added that she had “never knowingly said” that she had an interest in nanotechnology. Her work in nanomaterials, which won her a spot on the list, also dubbed whether 17 of the researchers on the list he regarded as working in organic electronics would describe their research as nanotechnology.

He said the field’s strong showing, particularly among those working in the solar-energy sector, was probably fuelled by specific funding that many nations were allocating to it, notably China.

“Blind butchers” in vice-chancellors’ offices are undermining nanosciences’ potential to deliver “paradigm shifts” in physics, biology and engineering, according to Nobel laureate Sir Harry Kroto.

Sir Harry, who was the co-winner of the 1996 Nobel Prize for Chemistry, remarks in response to a list of the scientists of the past decade, measured by the average citation count of their papers. The analysis (below) is based on Thomson Reuters’ Essential Science Indicators.

“A survey of the listed scientists’ websites reveals that 78 cite nanoscience and nanotechnology as either a main or partial research interest,” he said. “Sixty of the 100 top chemists over the past decade also work at least partially in the nano field, according to an analysis published earlier this month by THE.

Sir Harry said he was not surprised by the findings because nanoscience, which he defined as the “molecular-scale technology of more and more complex systems with advanced functions at nano- and even molecular dimensions” was in its 21st-century advanced chemical form. But he said precautions should be taken not to ignore the epochal advances in engineering, physics and biology which were being hampered by the traditional academic boundaries dividing the subjects.

He said cutting-edge areas such as nanobiology and nanophysics were “more chemistry than anything else”, but were “not getting the credit they deserve.” Consequently, work in the fields was often “limited in quality” due to a lack of chemical know-how in other subject areas.

“This is one major reason for the perspective of vice-chancellors who don’t recognize it as a key area,” he said. “I call it death by a thousand cuts, inflicted by blind butchers who cannot see that we need more expert chemists than ever before.”

He added that “small bands” was undermining the UK’s ability to contribute to advances in nanotechnology, which would be needed to respond to the “nowhere rapidly” without “delicate understanding of molecular behaviour and construction”. But he acknowledged that things were “not much better” in the US.

He said that although she would not officially a professor of physics, she regarded herself as a materials scientist. But she added that she had “never knowingly said” that she had an interest in nanotechnology. Her work in nanomaterials, which won her a spot on the list, also dubbed whether 17 of the researchers on the list he regarded as working in organic electronics would describe their research as nanotechnology.

He said the field’s strong showing, particularly among those working in the solar-energy sector, was probably fuelled by specific funding that many nations were allocating to it, notably China.

“Blind butchers” in vice-chancellors’ offices are undermining nanosciences’ potential to deliver “paradigm shifts” in physics, biology and engineering, according to Nobel laureate Sir Harry Kroto.

Sir Harry, who was the co-winner of the 1996 Nobel Prize for Chemistry, remarks in response to a list of the scientists of the past decade, measured by the average citation count of their papers. The analysis (below) is based on Thomson Reuters’ Essential Science Indicators.

“A survey of the listed scientists’ websites reveals that 78 cite nanoscience and nanotechnology as either a main or partial research interest,” he said. “Sixty of the 100 top chemists over the past decade also work at least partially in the nano field, according to an analysis published earlier this month by THE.

Sir Harry said he was not surprised by the findings because nanoscience, which he defined as the “molecular-scale technology of more and more complex systems with advanced functions at nano- and even molecular dimensions” was in its 21st-century advanced chemical form. But he said precautions should be taken not to ignore the epochal advances in engineering, physics and biology which were being hampered by the traditional academic boundaries dividing the subjects.

He said cutting-edge areas such as nanobiology and nanophysics were “more chemistry than anything else”, but were “not getting the credit they deserve.” Consequently, work in the fields was often “limited in quality” due to a lack of chemical know-how in other subject areas.

“This is one major reason for the perspective of vice-chancellors who don’t recognize it as a key area,” he said. “I call it death by a thousand cuts, inflicted by blind butchers who cannot see that we need more expert chemists than ever before.”

He added that “small bands” was undermining the UK’s ability to contribute to advances in nanotechnology, which would be needed to respond to the “nowhere rapidly” without “delicate understanding of molecular behaviour and construction”. But he acknowledged that things were “not much better” in the US.

He said that although she would not officially a professor of physics, she regarded herself as a materials scientist. But she added that she had “never knowingly said” that she had an interest in nanotechnology. Her work in nanomaterials, which won her a spot on the list, also dubbed whether 17 of the researchers on the list he regarded as working in organic electronics would describe their research as nanotechnology.

He said the field’s strong showing, particularly among those working in the solar-energy sector, was probably fuelled by specific funding that many nations were allocating to it, notably China.

“Blind butchers” in vice-chancellors’ offices are undermining nanosciences’ potential to deliver “paradigm shifts” in physics, biology and engineering, according to Nobel laureate Sir Harry Kroto.

Sir Harry, who was the co-winner of the 1996 Nobel Prize for Chemistry, remarks in response to a list of the scientists of the past decade, measured by the average citation count of their papers. The analysis (below) is based on Thomson Reuters’ Essential Science Indicators.

“A survey of the listed scientists’ websites reveals that 78 cite nanoscience and nanotechnology as either a main or partial research interest,” he said. “Sixty of the 100 top chemists over the past decade also work at least partially in the nano field, according to an analysis published earlier this month by THE.

Sir Harry said he was not surprised by the findings because nanoscience, which he defined as the “molecular-scale technology of more and more complex systems with advanced functions at nano- and even molecular dimensions” was in its 21st-century advanced chemical form. But he said precautions should be taken not to ignore the epochal advances in engineering, physics and biology which were being hampered by the traditional academic boundaries dividing the subjects.

He said cutting-edge areas such as nanobiology and nanophysics were “more chemistry than anything else”, but were “not getting the credit they deserve.” Consequently, work in the fields was often “limited in quality” due to a lack of chemical know-how in other subject areas.

“This is one major reason for the perspective of vice-chancellors who don’t recognize it as a key area,” he said. “I call it death by a thousand cuts, inflicted by blind butchers who cannot see that we need more expert chemists than ever before.”

He added that “small bands” was undermining the UK’s ability to contribute to advances in nanotechnology, which would be needed to respond to the “nowhere rapidly” without “delicate understanding of molecular behaviour and construction”. But he acknowledged that things were “not much better” in the US.

He said that although she would not officially a professor of physics, she regarded herself as a materials scientist. But she added that she had “never knowingly said” that she had an interest in nanotechnology. Her work in nanomaterials, which won her a spot on the list, also dubbed whether 17 of the researchers on the list he regarded as working in organic electronics would describe their research as nanotechnology.

He said the field’s strong showing, particularly among those working in the solar-energy sector, was probably fuelled by specific funding that many nations were allocating to it, notably China.