Scholar 311

Chapter 311

Therefore, if this experiment was successful, it would provide objective proof for his theory.

Because of this, Lu Zhou was full of expectations.

Although solving the lithium dendrites problem changed the energy industry, this experiment could build the bridge between mathematics and chemistry.

From the perspective of both mathematicians and chemists, it was an exciting thing.

After the experiment had begun, Lu Zhou's duties in China were finally finished. It was time for him to go back to Princeton.

Academician Xu heard Lu Zhou was leaving and drove him to the airport.

During the car ride, the old man had a disappointing expression. They were close to the airport when the old man asked, "How was your time here?"

Lu Zhou smiled and said, "It's been pretty good."

Academician Xu: "How about you just stay here? You don't have to borrow the laboratory building anymore. It's yours as long as you stay here!"

Lu Zhou knew the old man would say this, so he lightly shook his head.

"It's not time yet."

Academician Xu couldn't help but say, "But receiving a Fields Medal at Jin Ling University is the same as Princeton?"

“It’s completely different.” Lu Zhou was brutally honest when he said, “A native-trained Nobel Prize winner and an overseas-trained Nobel Prize winner might look the same on the outside, but their status is completely different. As an academician, you should know this.”

Lu Zhou’s statement was straightforward.

However, since his relationship with Jin Ling University was good, Academician Xu didn’t take offense to it.

Also, Lu Zhou had more reasons. For his system missions, he needed a higher stage to perform.

Academician Xu went silent for a while. He then sighed and said, “You’re right… Have a safe flight.”

Lu Zhou nodded and said, “Take care.”

…

At the end of February, Lu Zhou’s flight arrived in Philadelphia.

At the airport entrance, he saw Qin Yue driving his Ford Explorer to pick him up.

Before Lu Zhou left Princeton, he placed his car keys in his office drawer. He told Qin Yue to get his keys and pick up him in his own car.

Lu Zhou placed his luggage in the trunk and got in the car. Qin Yue started the car and chatted with Lu Zhou while driving.

“Professor, you’re finally back.”

Lu Zhou: “There was some stuff I had to take care of in Jinling. Are you guys doing well?”

“Very well.” Qin Yue nodded and said, “I just feel a lot of pressure as there are geniuses everywhere. It wasn’t like this in Kai University.”

Princeton was like other American universities; there were countless clubs and societies to join. Princeton students were just like any other students; they didn’t study in their room all day.

However, Princeton students worked hard and played hard. A lot of Princeton students took second-year classes in their first year. Most of them completed all of their undergraduate classes by the second year.

This was especially so in the mathematics and physics departments. If a student couldn’t keep up, they would have to switch majors to maybe history.

This was the Princeton model.

Of course, most of Qin Yue’s pressure came from Vera.

He had to put in twice the effort to keep up with her on the Collatz conjecture.

Even among the geniuses, there was still a difference in skill level.

“You should learn from Hardy. Hard work is the key to success, but don’t let study and work affect other areas of your life,” Lu Zhou said with a relaxed tone. “My suggestion is to find a hobby, a girlfriend, or something.”

Qin Yue coughed and said, “Professor, I already have a girlfriend.”

Lu Zhou was stunned as he looked at Qin Yue with disbelief. “You do? When?”

Qin Yue said awkwardly, “Yeah, she’s in China. We started dating in my third year.”

Lu Zhou: “…”

…

Lu Zhou decided to go to the Princeton Institute for Advanced Study before he went home.

Qin Yue parked the car in the building for Institute for Advanced Study and gave Lu Zhou the keys. Qin Yue then quickly went into the building.

Lu Zhou was confused. He didn’t know why Qin Yue didn’t wait for him to walk inside together. Lu Zhou didn’t think much of it and went inside.

Lu Zhou was confused about why his office door was closed.

He pushed the door open, and suddenly, he heard a confetti gun went off, and the office was soon filled with colorful small pieces of paper.

The five people inside the office building chanted, “Welcome back, professor!”

Lu Zhou looked at Hardy and immediately knew that this was Hardy’s idea.

Vera had a confetti gun in her hand as she blushed and said, “This was Hardy’s idea, I tried to persuade him not to do it.”

Hardy had a smug look as he said, “I originally planned to get champagne, but I heard you can’t have alcohol here, so I had to drink it myself.”

“Thank you for your gesture.” Lu Zhou patted a piece of confetti off his ear and said, “Also, please clean this place up.”

Although he was touched by his student's gesture, his office was a mess.

Hardy grudgingly picked up the broom and said, "Oh, Professor Lu, can't you make the newcomers do this job?"

A young man with freckles said, "How about I help you?"

"Don't. This person is full of energy; he needs something to do," said Lu Zhou. He walked to his office desk and looked through the pile of documents as he tried to find the resumes. However, he couldn't find it.

Lu Zhou turned around and looked at the two newcomers in the office. He then cleared his throat and said, "You guys… Introduce yourselves."

They were the two new master's students.

One was from the Massachusetts Institute of Technology, while the other was from Yan University.

Lu Zhou only planned to recruit three number theory students, but these two students applied for the field of functional analysis. Compared to number theory, functional analysis was more related to applied mathematics.

Although Lu Zhou wanted to recruit a student from Jin Ling University, no one from Jin Ling University was able to pass Princeton's interview.

Lu Zhou had to admit that Yan University had a stronger mathematics department than Jin Ling University.

The freckled boy immediately said, "I'm Jerick".

The other boy looked more serious as he said, "I'm Wei Wen."

Lu Zhou looked at Wei Wen for a while. He then suddenly asked, “Have we met before?”

Chapter 312

During the final stage of the competition, Wei Wen arrogantly walked up to Lu Zhou and said, “Your thesis wasn’t bad, but the championship is mine.”

In the end, Lu Zhou was the one that won the Higher Education Society Cup.

Since then, Wei Wen had been trying to catch up to Lu Zhou.

However, the difference between them only became bigger and bigger; Wei Wen couldn’t even see God Lu’s taillights.

When Wei Wen attended the conference at Beijing Normal University, he saw Lu Zhou winning the Shiing-Shen Chern Mathematics Award. Wei Wen wanted to jump off a bridge, but he still aimed to catch up to Lu Zhou.

However, even though Wei Wen set an unrealistic goal, he was still able to accomplish many achievements.

Wei Wen received his bachelor’s and an offer from Professor Lu at Princeton. He was a god among his peers and a “model child” among his family friends.

However, Wei Wen was still far from where he wanted to be.

It was actually his decision to choose Lu Zhou as his supervisor.

The reason was simple; Wei Wen wanted to improve.

Lu Zhou didn’t really know the personalities of his two students yet, so he didn’t assign them any work. He only gave them each a textbook and told them to write notes on it.

Fundamental studies would start from the textbooks. In order to find an interesting topic to conduct research on, one needed a comprehensive understanding of that field.

After that was more advanced studying.

To really dive into a certain topic, advanced studying would require reading theses and documents.

Even if someone used these theses as resources and made a millimeter of progress, it would still be worthy of a graduation thesis.

These two master's students were still far from publishing any theses.

Right now, they had to build up their fundamental knowledge.

There was no shortcut.

By the time Lu Zhou got back, his office laboratory had returned to normal.

Even the energetic Hardy had calmed down and was quietly doing his research.

Time flew by.

Around six o'clock, some of the students left the office and went downstairs to eat.

There were only two people in the office.

Vera looked around the office.

She made sure that there was no one else in the office before she picked up the first draft of her thesis and walked to Lu Zhou's desk.

Lu Zhou looked up at Vera and remembered her emails. He then placed down his pen and asked, "Do you plan on telling me about your discovery?"

Vera looked embarrassed as she handed out her thesis.

"… Please look at it for me."

Lu Zhou took the thesis and flipped through the pages. After a while, he nodded his head.

Not bad.

Among his three students, Vera was the only one that had a true understanding of the Group Structure Method. She was the only one that could integrate it into her own research.

Not only that, but her thought process was similar to Lu Zhou's.

Strictly speaking, the Collatz conjecture was an additive number theory problem, but it looked like a complex analysis problem as well. However, it wasn't fully compatible with the Group Structure Method.

What Vera did was to convert the Group Structure Method to be compatible with all natural numbers instead of only using prime numbers.

Of course, this was no easy task. She only did a specific analysis of a specific problem, and the flaws in her work were obvious.

Lu Zhou looked at the thesis and drew two question marks on it. He then said, "I have a few questions."

Vera said, "Please go ahead, professor."

Lu Zhou: “13th line, fourth page. I noticed that you set the mapping K: →△ equals to πog = f, can you tell me what this part means?”

Vera looked at the thesis and explained: “K(x) is a bounded holomorphic function on the complex plane. Using Liu Wei’s theorem, we prove that Q(x) is the value function, then we can prove that equation (7) holds.”

“This step is fine.” Lu Zhou was impressed at Vera’s logical reasoning, and he said, “But on line 11, page seven, I noticed that you are using equations (7) and (8). Your conclusion was that each branch of D of Φ(g) containing a positive integer has z0∈D, but this step is wrong.”

Vera looked at the thesis for a while.

She was a little embarrassed, and she lowered her head.

“You’re right… I’ll rethink it.”

“Don’t be discouraged, your work was good,” Lu Zhou said. He continued, “If you solve the problems, this thesis would be an outstanding achievement.”

Vera bit her lip and shook her head; her blonde hair gently swayed.

“But I was still wrong.”

Lu Zhou looked at his student and thought for a moment before he said, “I have my first number theory class on Wednesday, you should come.”

Lu Zhou: “Although undergrad classes aren’t that useful for you, you’re still my assistant. You need to cover for me when I’m busy.”

Vera suddenly looked nervous, and she asked, “Do I have to lecture?”

“Of course, lecturing is part of being an assistant, I told you this before.”

Lu Zhou smiled and continued, “Also, occasionally thinking about obvious problems will be very helpful for your research. It might inspire you. When I was solving Goldbach’s conjecture, I was inspired by Fefferman’s number theory class even though his class had nothing to do with Goldbach’s conjecture.”

Vera opened her mouth and wanted to say something, but Lu Zhou patted her back and interrupted her.

“Relax, you already did the Berkeley report, so why are you still scared of a Princeton lecture?”

Vera blushed and lowered her head.

“Okay.”

…

Lu Zhou was jetlagged, and therefore, he wasn’t that hungry.

He asked Vera to bring a bacon sandwich for him. He then stopped working and started to sort through his mail.

He was gone for a month, and his drawer was filled with mail.

Most of them were contracts sent by White.

On the bottom of the pile of mail, Lu Zhou pulled out a surprisingly well-packaged letter.

He looked at the sender’s name and was stunned.

“American Chemistry Society?”

Lu Zhou opened the envelope.

“Dear, Professor Lu, I am the president of the American Chemical Society…”

Lu Zhou skipped the middle and read the last line.

From his experience, the important part of the letter was always at the bottom.

He was shocked.

Chapter 313

F*ck, they’re not actually going to give a prize, right?!

Lu Zhou was confused and excited. Suddenly his office door opened, and Hardy walked in with Jerick and Wei Wen.

Hardy looked at the letter in Lu Zhou’s hand. He then looked at Lu Zhou’s face and suddenly shouted, “Oh my god, professor, did you receive a love letter?”

Lu Zhou nearly ripped the letter.

What the f*ck?

Vera came back holding a bacon sandwich. When she heard Hardy mentioning a love letter, she walked to the door nervously.

Fortunately, it was a false alarm…

Lu Zhou stared at Hardy and spoke in a rude manner, “If you joke about my personal life again, I promise you’ll have a very busy spring break.”

Hardy suddenly looked uncomfortable.

“Oh, please don’t be like this, I already have plans with my…”

Qin Yue coughed and tapped Hardy’s arm.

Qin Yue knew that nothing good would come out of Hardy’s mouth.

Hardy originally wanted to say that he planned to go for a vacation with his girlfriend in the Great Rift Valley over the spring break and to enjoy a taste of Southern East Africa.

Vera felt relieved after hearing that there was no love letter, and she curiously asked, “Professor, what is that?”

Lu Zhou: “Nothing, it’s from the American Chemical Society.”

Hardy whispered, “Jesus, there are still people that physically send mail?”

Wei Wen had a different focus, and he said, “American Chemical Society?”

Lu Zhou placed the letter in his drawer and said, “Yeah, remember my Nature thesis a while ago? They plan on giving me the Adams Chemistry Prize.”

The office was suddenly quiet.

Everyone stood frozen to the spot as they stared at Lu Zhou.

Especially Wei Wen, his mouth was wide open.

There wasn't a higher mathematical award that could be given to Lu Zhou. Even if he won the Ramanujan gold medal, it would only be the icing on the cake.

However, this Adams Chemistry Prize was obviously not in the field of mathematics.

Wei Wen didn't know chemistry that well, he didn't know what lithium dendrites were. But now, he knew that not only was Lu Zhou a god in the field of pure mathematics, but Lu Zhou's skills in applied mathematics was also godly.

He didn't know why; having a nutty supervisor was suppose to be a good thing, but he felt a sense of distaste in his heart.

Jerick gulped and asked, "Professor, do you plan on opening a class? Can I apply?"

Applied mathematics was one of the strongest fields at Massachusetts Institute of Technology, and Jerick had a double degree in organic chemistry and applied mathematics.

The reason why he applied to the field of functional analysis was that he wanted to study under Lu Zhou.

Lu Zhou smiled and said, "If you carefully complete the tasks that I have given you, I can tell you some insider information. However, I haven't perfected my theory yet, so my help will be limited."

There was no one in the entire materials science field that could understand Lu Zhou's theory, and not many mathematicians were interested in this field.

Thus, Lu Zhou was happy to distribute his knowledge.

However, it would be a waste of time trying to teach this knowledge to Jerick.

Jerick said, “Professor, you’re too humble. If you think that your theory isn’t perfect, then no one can claim to really understand the field of computational Materials.”

“I’m not humble, this is only the thoroughness of science,” said Lu Zhou. He then continued, “The mathematical model of the modified PDMS film is the only example, and this theory isn’t applicable to the other fields. A perfect computational materials science theory should be capable of being applied to all materials.

“A theory that cannot be applied, no matter how strong, is not perfect.”

This wasn’t only the goal of computational materials, this was also the goal of computational chemistry.

A mathematical approximation could be used to calculate the properties of molecules. Properties such as energy, dipole moment, quadrupole moment, vibration frequency, reactivity, etc… These could be used to explain chemistry problems.

If someone made a mathematical model on this scale, the impact on the entire industry would be huge. The experimenter would only need to input the properties of the required materials, and he or she could deduce the molecular structure through complex calculations. Even if the model provided hundreds of possibilities or only a general direction, it would save millions of dollars in research.

This might sound unfeasible, but with the current rate of computer development, it wasn’t impossible.

Perhaps in the near future, supercomputers would become the standard for every large material science laboratory, and every small and medium-sized research institutes would purchase computing credits.

Jerick was shocked by Lu Zhou’s words.

It was almost like Lu Zhou had just opened a door and showed Jerick a completely new world.

If Lu Zhou succeeded, he would undoubtedly change the chemistry industry.

Jerick was now even more appreciative that he had Lu Zhou as his supervisor.

Wei Wen had a complicated expression on his face.

He had been studying applied mathematics, but he had never thought about extending a mathematical theory to another field. He was only interested in mathematics.

Maybe it was time for Wei Wen to make some changes…

“A theory that cannot be applied, no matter how strong, isn’t perfect,” Vera quietly whispered to herself. Her blue eyes shined with excitement.

She didn’t know if she found her inspiration from Lu Zhou or if she felt that this was her mission, but she was suddenly more motivated than ever before.

The students in the office were lost in deep thought.

Hardy was the one to break this silence.

He came up with a conclusion and spoke in a serious manner, “A famous mathematician just won a chemistry award, and this is no doubt a great moment.

“I think we need to party and celebrate!”

Chapter 314

Originally, he only planned to invite his students for a celebration. However, the news of his party was spread around and more and more people started to arrive at his house.

First, it was Luo Wenxuan and his girlfriend. After that, it was Edward and his supervisor, Witten.

Then, it was Deligne. Although this old Belgium man didn’t like crowded places, he still came to the party with a bottle of whiskey.

After that, it was Lu Zhou's friends from the Ivy Club, his professor friends, and researchers…

Thankfully, Lu Zhou had prepared a lot of food and champagne beforehand.

The lawn in front of the small house was filled with the smell of barbecue and beer.

Lu Zhou stood next to the long table, and he was discussing with his previous supervisor.

Deligne had a different point of view than Lu Zhou, and he thought that this was a meaningless job and that Lu Zhou was wasting time.

"… Mathematics is pure, it's more of an art than a tool. Mathematicians should leave the applications to chemists and physicists."

The old man took a sip of whiskey and looked sharp as ever.

Witten suddenly joined in the conversation and said, "My dear Professor Deligne, I have to disagree with you. Mathematics is a great tool, but its greatness cannot be shown only in the field of applied mathematics. It has to be applied to other fields to truly show its value… For example, mathematical physics."

Deligne then responded ruthlessly, "I don't see your M theory being applied anywhere." He turned to Lu Zhou and raised his glass.

"Regardless, congratulations on the award."

Lu Zhou toasted with his ex-supervisor and said, "Thank you."

"Congratulations as well," said Witten as he smiled and toasted with Lu Zhou. He then casually said, "Maybe the Princeton Institute for Advanced Study should open a new department…"

Deligne said, “Impossible.”

Witten shrugged and said, “Okay, I was only joking.”

The original intention of the Princeton Institute for Advanced Study was to establish an institute engaged in purely theoretical research. The seven full-time researchers in the Natural Science Research Institute were all researching theoretical physics and astrophysics.

As for the mathematics department, there were many fields of research, but they were mainly in pure mathematics.

After all, there were more than enough people studying applied science. There was a need for people to engage in purely theoretical research.

As for the point of theoretical research?

Before computer chips, no one knew the importance of quantum mechanics and theory of relativity.

…

Everyone had a great time at the party; Lu Zhou was also quite happy.

The Adams Chemistry Prize was unexpected.

He thought that his first non-mathematical award would be in the field of theoretical physics; he didn’t expect it to be chemistry.

Although the US$10,000 prize money wasn’t much, most scholars didn’t care about the money.

Chemistry scholars were more industrious than mathematics and physics scholars. As long as they dabbled in intellectual property, they could easily achieve financial success.

Lu Zhou would have to give a speech at the Organic Chemistry Conference held in San Francisco in April this year.

This speech could be either academic or non-academic; it was up to the prize winner.

Even though Lu Zhou didn't have to submit a thesis in advance, he still wanted to prepare for it.

Coincidentally, the third day after he returned to Princeton, Professor Sarrot video-called him and reported on the research progress.

"… According to your request, we have done 200 sets of experiments. The relevant experiment data has been sent to your email. However, I have some bad news. We didn't observe your prediction of the cage-like molecular molecules. In my opinion, the use of carbon nanotubes to modify fullerene materials sounds interesting, but it isn't a good research idea."

Sarrot sounded burnt out.

He had been dealing with this matter for a month— controlling reaction temperatures, reaction times, and doing a lot of experiments. Unfortunately, they didn't discover any surprising result.

Lu Zhou sat in his office chair as he twisted his pen and asked, "So, nothing came of it?"

"Not necessarily." Sarrot shrugged and said, "Although we didn't get what you wanted, we still found a lot of by-products that were never seen before… But we don't know what the samples could be used for."

Lu Zhou was interested, and he said, "Send me the by-products."

Sarrot: "Okay, I'll send it to your office at the Princeton Institute for Advanced Study?"

Lu Zhou said, “Send it to the Frick Chemistry Laboratory. I’m not sure if the reception at Princeton Institute for Advanced Study allows chemical packages.”

Lu Zhou hung up the call and turned on his computer. He then pulled up the email from Sarrot.

The email contained product information, analysis tests, and other data.

Lu Zhou carefully read the experiment report and sighed. He leaned back on his chair and went into deep thought.

From the data, Lu Zhou could see that against his predictions, the π-bonded carbon nanotubes and fullerene materials didn’t recombine under the thermal reaction.

Although this reaction was theoretically feasible, from a practical perspective, the countless side reactions made this process extremely difficult to achieve.

Lu Zhou didn’t expect that he wouldn’t even receive a microgram of a sample.

“It seems that I have to redesign the experiment!”

Lu Zhou lightly tapped his pen on the desk and began to think.

Chapter 315

It wasn’t that these people were all enrolled in the number theory class. In fact, many of them who were not enrolled in this class chose to attend it.

It was almost like this stage was made for Lu Zhou. Ever since his first Princeton report, he had become a legend on the Princeton campus.

Even now, graduate students were still talking about that legendary report.

A class taught by the professor who solved the Goldbach's conjecture and twin prime conjecture? Of course everyone would be interested in what this class would be like.

In order to live up to the expectations, Lu Zhou heavily prepared for this class.

In order to look more like a professor, he even wore a suit and tie to the lecture.

Since Lu Zhou had a decent figure, he looked quite sharp after cleaning himself up.

As he walked into the classroom, many female students looked at him with interest.

Just like how a young female teacher attracted the attention of the boys, a handsome male teacher was equally attractive to girls.

Vera sat at the back of the classroom. She covered her blushing face with a textbook.

However, most people didn't notice Vera at all. They didn't associate this petite girl with Lu Zhou at all. Instead, they thought that she was a first-year student and didn't realize that she was an assistant lecturer.

Lu Zhou stood on the podium and looked at the students. He then smiled and said, "Let me introduce myself. I am Lu Zhou, and I'm from Jiangling, China."

Lu Zhou wrote down his introduction on the blackboard before looking back at the students. He said with a relaxed tone, "This is our first time meeting. In order to deepen our understanding of each other, you guys can ask me three questions before the lecture starts."

The students didn't think that the legendary God Lu would be so approachable; they were all surprised at this gesture.

A male with darker skin and glasses raised his hand.

“Professor, can we ask any question?”

Lu Zhou smiled and said, “Sure.”

The student with glasses then asked, “The Lu Zhou who published the chemistry paper on Nature, is that you?”

Lu Zhou smiled and said, “If you’re talking about the modified PDMS film thesis, then yes, I was the one that wrote that.”

The people in the classroom gasped.

Although there had been rumors of this before, most people didn’t believe it.

In Western countries, having the same name with someone else was a common occurrence. In fact, many Westerners would often name their sons after their fathers.

It wasn’t uncommon for scholars to be proficient in both mathematics and physics, but it was extremely rare for a scholar to be proficient in both mathematics and chemistry.

This rumor was finally confirmed.

Not only that, it was confirmed by the legendary God Lu himself.

A white girl with long hair who sat next to the guy with glasses spoke in astonishment, “Which is saying, that patent fee…”

Lu Zhou coughed and said, “I will not answer any personal questions regarding the patent.”

An Asian student cleverly changed the words and asked, “Then, can I ask what was the first thing you bought after receiving the patent money?”

The crowd was waiting for Lu Zhou to answer.

Obviously, they didn't expect Lu Zhou's answer.

Lu Zhou thought for a moment before he answered, "Strictly speaking, it was a research institute. I need experimental data in order to perfect my computational materials science theory."

The crowd was in disbelief.

A chubby guy sitting next to the window said, "A laboratory? If it were me, I would definitely buy a Porsche."

Another person said, "I'm guessing the professor is lying. If it were me, I would rent a mansion and hire a dozen girls…"

"Hey, Monroe, you're way too perverted! Maybe this is why you can't get a girlfriend."

"…"

Lu Zhou looked at the noisy classroom, clapped his hand, and said, "Okay, enough nonsense, let's begin. Turn the textbook to the introduction page. Although I know that many of you have already read this part, we will still start from here."

A student raised his hand and asked, "Professor, there's still one more question left."

Lu Zhou replied mercilessly, "We'll leave it to after class. I am disappointed at you guys."

Of course, Lu Zhou was only disappointed at the pointless questions.

Because after the class started, Lu Zhou was quite surprised at the performance of these students.

No wonder this was the smartest place in the world. Princeton students left a deep impression on Lu Zhou. Lu Zhou was impressed not at their talent, but their ability to concentrate as well as their pre-class preparations.

They were able to quickly absorb every topic that Lu Zhou taught.

Although Lu Zhou didn't deliberately speed up the lecture, he was already on page 30 after half an hour, and no one was falling behind.

At the very least, he didn't feel like anyone was lost.

Lu Zhou was gaining experience by teaching to these students.

Even though this experience might not be of any use right now, but it could come in handy one day.

The lecture gradually came to an end.

Lu Zhou closed the textbook and announced the homework assignment.

The students started to applaud.

Lu Zhou smiled and nodded at his students. He then walked out of the classroom.

He was walking in the hallway and about to go downstairs. Suddenly, Professor Fefferman popped out and said, "It seems that you're quite popular among the students, how do you feel?"

Professor Fefferman was the head of the mathematics department at Princeton University. Even though he had won a Fields Medal, he was still a humble person. Because of this, he had a good relationship with many people, and this included Lu Zhou.

Lu Zhou smiled and said, “I feel pretty good. The students here are all talented, and I feel a sense of accomplishment when teaching them. Also, it’s useful to occasionally think about simpler, basic problems.”

Fefferman was surprised at Lu Zhou’s statement, and he said, “I’m glad to hear this. I hope this job will bring inspiration to your research.”

Lu Zhou smiled and said, “It definitely will.”

…

Vera sat in her chair inside Lu Zhou’s office as she quietly sorted out her lecture notes.

When Lu Zhou walked in, she placed her pen down. She took her notebook and walked up to Lu Zhou.

Lu Zhou smiled and asked, “How do you feel?”

Vera was a little puzzled, and she said, “I feel so difficult… Teaching and researching are two completely different things.”

“You’re right, but the two can be combined,” said Lu Zhou as he took her notebook and flipped through the pages. He nodded his head and said, “It seems that your understanding is pretty good. How about you teach the next class?”

“The next class?” Vera was flustered, and she whispered, “But… I haven’t finished preparing yet.”

“You have a week to prepare, so this shouldn’t be difficult.” Lu Zhou gave Vera her notebook back as he said, “You can do it.”

Vera took a deep breath and said, “I can do it!”

“Yeah, do your best.”

Lu Zhou returned to his office desk and opened up his email.

There was an unread email, lying in his inbox.

It was from the Frick Chemistry Laboratory.

The package that Sarrot sent over had apparently been delivered…

Chapter 316

“Did you switch to researching biology?”

Connie was confused, and he asked, “No, why did you ask that?”

“No reason…” Lu Zhou shook his head and said, “Forget about it.”

If this guy gets any buffer, he would basically be a hulk.

But he’ll probably get offended if I say this.

“… Actually, I know what you want to say.” Connie sighed and scratched his head as he said, “Because I’m too jacked, Professor Chiric doesn’t let me operate the equipment. He said that I might break it.”

“That’s…” Lu Zhou looked at Connie and didn’t know how to comfort him. Instead, he said, “I won’t treat you like that.”

Professor Chiric wasn’t skinny either. At the very least, he had the physique of a basketball small forward player.

Connie rubbed his nose and said, “Really? What do you need me to do?”

Lu Zhou looked at the scanning electron microscope in the laboratory and said, “Just… help me with the sampling processing. You know how to do it, right?”

Connie smiled and said, “I got this!”

Lu Zhou took out more than 30 samples from the sealed small glass jars and told Connie some important things to be aware of. He then carefully removed a small amount of black powder from the glass jar marked with No. 1 and mixed it with ionized water.

Sarrot had already processed the samples before shipping them. The sample powders were already purified and no further filtration was required.

However, Lu Zhou couldn’t just stuff the sample inside as the collection of hollow carbon spheres would worsen the observation.

Under Connie’s help, Lu Zhou ultrasonically dispersed each sample and carefully dropped the sample on copper plates.

“Done!”

Finally, after the samples were processed, Lu Zhou sighed and placed down the last piece of copper before he stretched his stiff neck.

Since carbon itself was a conductive material, the processing was complete. If it was an insulator material, the sample had to be processed with gold.

Was this method expensive?

No, actually it wasn’t that expensive.

Gold was actually relatively inexpensive compared to the other precious metals and organic reagents used in the laboratory. For the samples sent by Sarrot, the average cost per milligram was more than one hundred dollars.

The reason why Lu Zhou was so meticulous was that the cost of this experiment was coming out of his pocket.

Fortunately, his assistant Connie lived up to his expectations and didn't mess up a single sample. Connie placed the copper plate down and asked Lu Zhou, "My side is done, what do we do next?"

Lu Zhou said, "Let's scan it with the electron microscope."

The rest of the work was easy, and Lu Zhou operated the equipment step by step. He stuck the copper plate onto the sample holder using a conductive plate before he fed it into the chamber.

Once Lu Zhou confirmed that the pressure inside the chamber was stable, he carefully began to input various parameters.

"The emission current is set at 10μA, the working distance is 8mm, and the scanning mode is Sei…"

Lu Zhou used the two joysticks on the sample controller to carefully move the sample into position. Connie stood in front of the computer and adjusted the aperture and acceleration voltage.

The work was completed.

Now, it was time to harvest the results.

This was the easy part.

Lu Zhou could easily collect any data he wanted just by adjusting the resolution, the accelerating voltage, and the working distance.

Connie looked at the equipment and said emotionally, “This thing is much easier to use than a normal electron microscope.”

“Of course.” Lu Zhou smiled and said, “If the experiment is successful, I can give the rest of the renting credits to you.”

Connie said, “Really? Thank you!”

Even though Connie wanted to use Professor Chiric’s scanning electron microscope, Professor Chiric didn’t want to waste time on his student’s PhD thesis. After all, Chiric had a ton of experiments to do himself.

Right now, Lu Zhou was like an angel sent from heaven.

Lu Zhou smiled and said nonchalantly, “Of course, as long as you follow my instructions, I will compensate you.”

Connie was even more motivated after hearing Lu Zhou’s words.

The resolution was enlarged to the nm scale, and the microstructure of the hollow carbon sphere was visible to the two experimenters.

Lu Zhou looked at the scanning images and was intrigued.

He suddenly thought of something and said, “Connie, from these samples, help me find hollow carbon nanospheres with a specific surface area in the range of [2326m2g-1, 3762m2g-1] and a diameter of [60nm-70nm]!”

“Okay,” Connie replied. Without any hesitation, he began to operate the computer. Soon after, he said, “… Professor, samples 11, 14, 15, and 23 all fit your requirements. What does this indicate?”

Lu Zhou found the corresponding sample jars and stared at the black powder inside.

“I need you to do something.”

Connie said seriously, “Anything you want.”

“Borrow a battery tester and a button-type battery mold for me.” Lu Zhou look around the laboratory and added, “And some samples of sulfur.

“I have to do something big.”

Chapter 317

If it was before, Lu Zhou would definitely feel like he was wasting money.

But now…

Okay, he was still a little distressed.

However, he wasn’t as distressed as before.

Lu Zhou asked with a serious tone, “Does the equipment make battery samples?”

Connie immediately said, “No problem, this is easy!”

Lu Zhou thought for a bit and said, “You are responsible for No.11 and No.14. I’ll do samples No.15 and No.23. Mix the hollow carbon sphere powder with sulfur, using the ratios of 30%, 20%, and 10%. Then make a positive electrode material, and assemble the lithium battery, do you understand?”

Connie said, “Of course!”

The negative electrode material synthesis process was a piece of cake. The modified PDMS film and the copper core lithium plate was the standard of any major materials research institutes.

However, the positive electrode material was slightly more difficult.

It wasn't just the hollow carbon spheres; all carbon nanomaterials had similar problems.

The simple mechanical stirring and grinding could only macroscopically mix the hollow carbon spheres with the matrix powder. It couldn't disperse the hollow carbon spheres on the microscopic level.

Before the hollow carbon spheres were mixed with the sulfur, they were also dispersed in ethanol by adding a surfactant such as polyurethane.

The remaining steps were similar to Lu Zhou's first lithium battery experiment.

The batteries were assembled in a glove box and then connected to a battery testing system. The testing system was able to calculate the performance of the materials by doing a large number of charge and discharge tests.

This step required no skills.

Actually, researching materials science wasn't that difficult.

The current research and development of new materials were based on the researchers' "scientific intuition" and a large number of repeated "trial" experiments. They tried to find a feasible material under set conditions. If Lu Zhou could build a set of materials science theories, then it would be game-changing.

Although mathematical methods could greatly reduce the number of experiments required, Lu Zhou still had to do some experiments.

…

Lu Zhou remembered that the last time he worked this hard was around this time last year.

In order to complete the Goldbach's conjecture, Lu Zhou locked himself in his 20 square meters apartment. He completely immersed himself in the labyrinth of numbers and eventually found a way out.

Lu Zhou's excitement right now paled in comparison to back then.

He felt nostalgic for his mathematics days.

It had been a week since his experiment started.

Other than sleeping, Lu Zhou had spent all his time in the laboratory.

Two days ago, Yang Xu, who managed the experiment at the Jinling Institute of Computational Materials, created a spreadsheet of the effects of the surface area, pore size, and the ratio of polysulfide in the electrolyte on the sulfur loading. This data arrived in Lu Zhou's mailbox.

In order to not delay the Jinling research institute's progress in the experiment, Lu Zhou needed to build a mathematical model as soon as possible and develop a plan for the next experiment.

His work seemed to be piled together.

Lu Zhou threw his pen aside and looked at Connie, who was looking at a sample.

"How is No. 15 doing?"

Connie had dark circles around his eyes as he looked at the scanning electron microscope and shook his head. He said, "The last group was completely scrapped. Almost all of the sulfur was deposited on the surface on the carbon material. You can look at it, it looks very pretty…"

Lu Zhou sighed and said, "Take a scanned image of the sample and dispose of it… I've seen enough."

This is horrible.

It seems that samples 11, 14 and 15 are all useless.

Facing the tragic result, Lu Zhou couldn't help but wonder if his theory was wrong.

Can the surface area of [2326m2g-1, 3762m2g-1] and the hollow carbon spheres in the range of [60nm-70nm] really inhibit the diffusion of polysulfide compounds?

He didn't want to doubt his theory and assumption.

Because he had calculated this assumption many times and received the same result.

If his theory was wrong, then he would face a difficult choice.

He could either pretend he didn't know or he could be a moral scholar. Once he found his mistakes, he could earnestly ask the Shuimu University to withdraw his thesis submission…

The former solution was feasible. Even if Lu Zhou were proven wrong by someone in the future, he could claim that it was an "honest mistake". No one would blame him…

Wait a minute…

Lu Zhou suddenly realized something.

My experiment isn't even over, why am I thinking of the aftermath.

What kind of mentality is that?

Lu Zhou clenched his fists and took a deep breath. He then calmed himself down and looked at Connie.

“How is sample No. 23 doing?”

“Let me look at it… 10% and 30% were destroyed within 200 revolutions, and 20% is… Unbelievable, it has been 500 revolutions, but it’s still struggling to survive.”

The word struggling was used interestingly.

It seemed that Lu Zhou’s assistant had no hope for this experiment.

However, Lu Zhou still had hope.

He restrained his excitement and asked, “What is the volume change of the anode material?”

Connie looked at the battery through the transparent glass. He squinted his eyes and said, “It doesn’t seem to have changed.”

Lu Zhou shouted, “Don’t give me an estimation, I want an accurate answer!”

“I know, I’m just kidding…” Connie disassembled the battery and carefully removed the positive electrode material. He then measured the width change with a vernier caliper.

Even at a macroscopic level, the volume expansion of carbon-sulfur composites was very obvious.

Connie recorded the measurement and was confused.

He recorded it again.

And again…

Connie looked back at Lu Zhou. Lu Zhou frowned and asked, “A failure?”

“No…” Connie shook his head. He gulped and said, “The results are unbelievably good…”

“Determine the chemical composition of the electrolyte!” Lu Zhou stood up from his chair and snapped, “Do it fast!”

Chapter 318

At the nanometer scale, the porous structure of sample No. 23 allowed the electrolyte to enter the interior of the composite, thus increasing ionic conductivity. Also, the absorption capacity of the surface could effectively prevent the diffusion of polysulfide compounds into the electrolyte, thereby effectively suppressing the shuttle effect.

This proved that Lu Zhou’s idea on the hollow carbon spheres had its potential.

Of course, this wasn’t the main part.

The main part was that the hollow carbon spheres with a surface area of up to 3025m2g-1 and a diameter of 69nm perfectly met the predictions of Lu Zhou!

His predictions were that a hollow carbon sphere with the specific surface area in the range of [2326m2g-1, 3762m2g-1] and a diameter of [60nm-70nm] could effectively inhibit the diffusion of polysulfide compounds in the electrolyte!

“Unbelievable… We did it, we did it!” Connie waved his fist around in excitement. If it wasn’t for the sensitive instrument around him, he would scream out loud.

Lu Zhou smiled in relief. The knot in his heart had unraveled.

However, he was still a long way from solving the shuttle effect.

But this was undoubtedly a good start.

“Don’t get too excited, we didn’t completely solve the shuttle effect,” Lu Zhou said. He then paused for a second before continuing, “After a maximum of 500 revolutions, the rate of loss of the positive electrode material will increase, and the capacity will decay. This technology needs to be improved.”

Connie said, “Bro, you’re too hard on yourself. Not every research result can be made into a product!”

Connie was right.

Even though there was yet to be any application, this achievement was already outstanding.

Any professor would be ecstatic at this result.

However, Lu Zhou was more low-key.

He said, “Although this result needs improvement, it should be enough for an SCI thesis.”

Connie asked, “What do you plan on calling this new material?”

Lu Zhou thought and said, “We can call it HCS-1.”

HCS was the acronym for hollow carbon sphere. Because it was only a prototype, it was numbered -1.

Connie said, “HCS-1? Forgive me but this name is not creative at all. It doesn’t convey the amazing effect. Can’t you come up with a better name?”

What’s the point of naming a broken material that has no application.

I’m not the one that came up with hollow carbon spheres.

Lu Zhou said, “Do you have any better ideas?”

Connie said, “How about LZ-1? It’s an acronym of your name.”

Lu Zhou: “…”

What is this?

Lu Zhou thought that Connie had some genius idea, but that clearly wasn’t the case.

Finally, Lu Zhou dismissed Connie’s suggestion and went with HCS-1.

It would feel tacky if he had named his materials LZ-1, LZ-2…

HCS-1 was a lot better.

…

Although the industrial applications of HCS-1 were limited, it could still be valuable. If a small company was interested in buying the research, then it would be worth a lot of money.

This time, Lu Zhou wouldn’t have to take a year to write his thesis.

Lu Zhou was too careful when dealing with the PDMS materials that it took him over a year. Furthermore, he had no experience.

After consulting his manager, White Sheridan, he learned that although it clearly stated that the content of the patent application could not be disclosed before the “patent filing date”, it was fine as long as “disclose date” was after the “patent filing date”.

Which was to say that once he received his patent number, he could submit the thesis.

Lu Zhou sat in his office at the Institute for Advanced Study and wrote a letter of authorization for Star Sky Technology to handle the patent.

Lu Zhou signed his name on the document and sealed the envelope.

Suddenly, Hardy came in with a towel around his neck.

This Brazilian guy loved soccer and was a member of the Princeton soccer club. Although soccer wasn't as famous as baseball or American football, there were still many people playing it.

Lu Zhou had previously played with the Princeton soccer club. However, he realized that slow movement sports were more suitable for him, so he stopped going for soccer.

Hardy was about to sit down and rest, but when he saw Lu Zhou writing a letter, he was curious and walked over.

"Professor, what are you writing?"

Lu Zhou didn't answer and handed him the letter.

"Perfect, go to the mailroom for me and deliver this letter."

Hardy took the letter from Lu Zhou and said, "I knew I shouldn't have come here…"

Lu Zhou: "If you didn't ask me what it was about, I wouldn't have asked you."

Hardy: "…"

Hardy walked outside the office with the envelope, and Lu Zhou began writing his thesis.

Star Sky Technology had already established a patent department, so they could easily handle the patent for Lu Zhou.

There were two theses that needed to be written.

One thesis was about the effect of surface area and pore size of the hollow carbon spheres on the diffusion rate of polysulfide compounds. Another thesis was about the HCS-1 hollow carbon sphere material.

The former was purely theoretical. It would include a lot of graphs, analysis, and proofs. It would take around thirty pages to complete. The latter was more application-based, and it could be completed within fifteen pages.

Speaking of which, where should I submit the thesis?

Lu Zhou placed his hands on the keyboard and began to think.

Nature or Science?

I really don't know…

Chapter 319

To be honest, the editors couldn't judge the correctness of the theses. They could only look at the thesis writer's identity and reputation to determine if the paper was eligible for peer review.

As usual, Warren made himself a cup of black coffee before starting work. He opened his work email and received a thesis from a technical editor.

He looked at the email and had a headache.

“I think the technical department should develop some new features for our office software.”

Brock, who was working, asked, “Like?”

Warren sighed and said, “For example, before sending the theses to us, the theses should be ranked by the cumulative impact factor of the author’s past submissions. It should also be ranked according to the reputation of the research institutes.”

Brock smiled and said, “This is a good idea, but it would be unfair to those unknown authors.”

“Who cares? We’re Science. Shouldn’t we use a more scientific method to screen theses?” Warren said as he dragged the thesis into his recycle bin. He said, “Some theses are a complete waste of time.”

He soon opened the next thesis.

Warren looked at the title and couldn’t help but complain in his heart.

Another lithium-sulfur battery one!

The previous thesis also claimed that it had solved the shuttle effect, but it only researched solid electrolytes. To be honest, there is nothing wrong with solid electrolytes, but some of the mistakes in the thesis were way too obvious.

He had seen too many subpar theses recently.

He subconsciously looked at the research institute and author. Just as he wondered if he should waste a few minutes reading the thesis, he was suddenly stunned by what he was looking at.

The author’s name looked familiar…

It was from the Frick Chemistry Laboratory.

Then Warren discovered something surprising.

There was more than one thesis that was submitted; there were two…

Warren silently looked at the calendar sitting at the corner of his desk.

He remembered that the last time Science published “highlights” on the modified PDMS paper was half a year ago. He couldn’t believe that within half a year, another “PDMS” level thesis appeared.

First Lu Zhou solved the lithium dendrites problem, now he solved the shuttle effect?

This is unbelievable!

Due to Lu Zhou’s reputation, Warren read the thesis carefully and line by line.

He then made a difficult decision.

During lunchtime, Brock stood up from his desk and was about to go grab some lunch.

Suddenly, he noticed that his colleague was staring intently at the screen. He curiously walked over and stood behind Warren.

“Lu Zhou? That Princeton professor?”

Warren meticulously looked at the thesis and said, “Yes, I don’t think there’s another Princeton professor with such a strange name…”

Brock said, “I cannot believe it, it has only been half a year… Two theses this time?”

“And it’s regarding lithium-sulfur batteries. Obviously, he has made some big progress.” Warren was still staring at the computer screen when he twisted his pen and said, “Two theses; one thesis on the specific surface area of hollow carbon spheres and the effect of pore sizes on the diffusion rate of polysulfide compounds, and the other thesis is about the research of HCS-1 hollow carbon sphere materials. The two theses are related. The former focuses on theory and the latter focuses on application… What do I do?”

Brock was hesitant, and he asked, “I think Professor Lu’s reputation is quite trustworthy. Wouldn’t it be better to leave it to the reviewers?”

Warren said, “I know, but the question is, which reviewer?”

This was a difficult question.

Brock was also troubled by it.

“The thesis on the hollow carbon sphere material HCS-1 is easy to deal with. Many carbon nanomaterials professors can review the thesis, but this other paper…” Brock thought for a while and couldn’t come up with a suitable candidate.

Not many mathematics professors were interested in organic chemistry. On the other hand, very few organic synthesis experts could understand the math behind Lu Zhou’s thesis.

There were many people dealing with carbon nanomaterials in the field of materials science. However, people that did both computational materials and carbon nanomaterials… There weren’t many at all.

Many computational material experts became programmers instead, as it had a much higher salary.

Because of Lu Zhou’s modified PDMS material, the computational materials community basically treated him as a god. It was like David Shaw in the field of computational chemistry.

It was really difficult to find a professor qualified enough to review Lu Zhou’s thesis.

Brock thought for a bit before saying, “How about we ask Professor Bawendi?”

“But is he in the field of carbon nanomaterials?” Warren said, “I heard he has been very busy recently and rejected many thesis reviews.”

Brock said, “But he has served twice as a reviewer for Lu Zhou. Or do you have a better idea?”

Warren hesitated for a bit before saying, “Then write him a letter and ask him to review it.”

Warren had no doubt that these two theses were worthy of publication.

If the shuttle effect was actually solved by using the HCS-1 material, then this result would be groundbreaking.

This type of groundbreaking result was a perfect match for the Science journal.

Chapter 320

Lu Zhou could see these signs from his last meeting with Grynberg. Without a doubt, their laboratory in Belgium was working non-stop trying to take the throne from Lu Zhou.

Therefore, Lu Zhou had to amp up his speed.

…

In the middle of March, after Lu Zhou received a reply from Science regarding his submission, he contacted Yang Xu, who was in Jinling, and arranged for a short video conference. He wanted to discuss the research plan with him.

Before the video call, Lu Zhou sent the related HCS-1 materials to Yang Xu’s work email. The email contained both the data that had already been submitted as well as the unpublished data.

Because of this, as soon as the call began, Yang Xu immediately asked, “The thing you sent me was about?”

Lu Zhou put it concisely by saying, “The next experiment plan and related materials are in that email. The physical samples will arrive soon. Simply put, I need you to try and find a method to stabilize and synthesize the HCS-1 material.”

The synthesizing method that Sarrot’s laboratory produced had a high variance. Strictly speaking, HCS-1 was only a by-product of this method; it could only be obtained using centrifugation and further purification.

Using this inefficient method, it was difficult to industrially produce HCS-1.

Unless someone was willing to pay US$100,000 just for one lithium battery and spend a ton more just to deal with the waste, from a logical standpoint, this battery was currently unfeasible.

There were two methods to promote HCS-1 material. One way was to change the preparation method and reduce production cost. The other way was to improve the material itself.

Using the HCS-1 as a reference idea, it wasn’t difficult to find HCS-2 or even HCS-3, which could be more suitable for mixing with sulfur.

Due to these reasons, Lu Zhou set up two research directions for the Jinling Institute of Computational Materials. One was to improve the production process of the HCS-1 material, and the other was to improve the HCS-1 material itself.

Unlike Sarrot’s laboratory, Lu Zhou had different requirements for the Jinling Institute of Computational Materials. Sarrot was responsible to complete the system mission of studying the topology of the molecules.

As for the Jinling Institute, they were responsible for solving the shuttle effect.

The energy industry needed to solve the shuttle effect, so did the country's energy department. Whether it was from a personal standpoint or from a commitment to China's energy department, Lu Zhou decided to work hard on this matter.

Yang Xu said, "This problem is difficult."

Lu Zhou smiled and said, "I believe you can do it."

Yang Xu: "Is there a more specific direction you can give me?"

Lu Zhou said, "I do have an idea. Write this down so that I don't have to send another email."

Yang Xu nodded and took out a piece of pen and paper.

Lu Zhou drank some water and said, "Glucose."

The two went silent for a moment.

Yang Xu then said, "… Glucose?"

Lu Zhou nodded and said, "Yes, specifically, the precursor from a copolymer of polyaniline and polypyrrole to glucose."

This was the conclusion from Lu Zhou's discussion with Sarrot. The reason they were able to reach this conclusion was due to their "scientific intuition" which was built from hundreds of experiments and calculations.

Although this "scientific intuition" might sound unreliable, it was at least better than "trial and error".

However, this idea was yet to be confirmed.

Yang Xu's eyebrow twitched.

"That's it?"

Lu Zhou waved his hand and said with a certain tone, "That's it."

No wonder you didn't want to send an email, you barely gave me anything.

Yang Xu couldn't help but complain in his heart as he put the pen and paper aside.

Lu Zhou said, "We're not the only ones researching this. I know Umicore and Nichia are also doing experiments. We are competing with international chemical giants. I know the mission is difficult, but I hope you can overcome it."

Yang Xu couldn't help but say, "If this really had potential, then you wouldn't have mentioned it during the meeting."

Lu Zhou was annoyed, and he said, "The situation at that time was special. Also, I didn't expect them to arrogantly publish the content of the meeting."

There was something else Lu Zhou didn't say.

Which was that he didn't expect so many to believe his words at the meeting…

…

The hollow carbon spheres had potential, and therefore, it had no shortage of competitors.

In the academic world, ideas were the least valuable.

Other than international chemistry giants like Nichia and Umicore, there were many other research institutes doing similar research. Some of them were partnered with a company, others received fundings from the government.

For example, Professor Wang Haifeng was one of them.

Far away at Zhi University, he was also busy working on the project.

However, he wasn't working on the experiment, he was working on the preparations for the experiment.

Around two weeks ago, the laboratory research project was finally confirmed. It was regarding using hollow carbon spheres and sulfur composites as the positive electrode in order to solve the problem of diffusion of polysulfide compounds into the electrolyte. Although he didn't like Lu Zhou, he had to admit that the hollow carbon spheres had potential.

He had already sent in his research fund application, and he should be getting a reply within a few days.

As the boss of the laboratory, right now he had to delegate work to his researchers.

Suddenly, his PhD student, Liu Hong, walked into the laboratory while holding a journal magazine.

Liu Hong looked like he had something to say but didn't want to say anything.

Wang Haifeng looked at his student and asked, "What happened?"

Liu Hong hesitated for a bit before speaking, "Professor… Someone else is also doing our research project."

Wang Haifeng, who was leaning on his office chair, nearly choked on his own saliva.

“What? Someone else is doing the same thing as us?”

What the hell is this?

How was this possible?

I haven’t even received the research project grant, who copied our idea?