

## Chapter 47

# EDWIGE (INIA) TYSZKIEWICZ

Paris

May 16th, 1997

**VM = Vivian Moses; ET = Edwige Tyszkiewicz; SM = Sheila Moses**

**VM:** This is talking to Inia Tyszkiewicz in Paris on the 16th of May, 1997.

Can I start by asking you what your early career in science was and how did it lead you to Berkeley?

**ET:** I was working for a few years before in an agriculture institute in France and after a few years I was thinking that it would be very good to leave France to see something else. I got the opportunity to get a scholarship from the International Atomic Energy Commission who gave me a scholarship at first for one year and they prolonged for a second year but I had to leave before the end of the second year because I got the opportunity to have the work exactly in another good institution. So it was funny because I wrote to three labs. in the States and the first answer I got from Calvin's lab. Really, after eight days I got the answer — I wrote one day and the eighth day I got the answer. It was fantastic! So I didn't wait for the others. I did it; I applied to have the position as a post-doc. Even I didn't have...at that time I didn't have my doctorate but it was a position like it was a doctor's in Calvin's lab.

**VM:** You knew about Calvin's work?

**ET:** Of course, of course. I already worked with plants, not exactly in photosynthesis, and I was interested to see how was his lab. and what could I do there.

**VM:** Did you agree with him before you went what you would do or did you wait until you got there?

**ET:** No, I just wrote to him that I am interested in photophosphorylation. It was the only subject I submitted to him in the letter and he accepted. When I came to Berkeley, he sent me to Roderic Park to talk with him and ask about the project. I have to say that it took one year between the letter I got from Professor Calvin and my arriving there to Berkeley.

**VM:** When you first got there did you know anybody in California? Did you have any friends, any acquaintances?

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**ET:** I had acquaintances because so many Polish people are all over and I had some cousins, Professor Lednetski — he was a professor in California University. But really, I didn't know anybody; I knew about them and I met them, of course, when I came but I didn't go there because of them.

**VM:** Where did you stay?

**ET:** In International House.

**VM:** So that was arranged before you went and you came straight there?

**ET:** Yes. I wrote to...I don't remember who told me but it is a good arrangement to be in this International House. You didn't live there?

**VM:** No, we were never there. We stayed in an apartment.

**ET:** I stayed there for six months, then I rent an apartment with two American girls, which was very convenient. All those places were so close to the lab. At that time it was still in the other...not in the round building but, how do you say?...Life Sciences Building.

**VM:** Yes. When you first knew that lab., the old wooden building had been destroyed...

**ET:** Yes.

**VM:** ...the old wooden building and you went into the Life Sciences Building.

**ET:** I didn't know this old one, which I would like to have known because...

**VM:** It was an interesting building.

**ET:** I think so.

**SM:** May I have the date when you arrived in Berkeley.

**ET:** I think it was December 15th, '59. I think it was that day: it was fantastic because it was a sunny day; I came to the lab. without any coat, students were lying on the...how to say...grass?

**VM:** On the lawns.

**ET:** Yes, which we don't see it in France, as you know. Probably not even...Yes, now you can see it but not at that time.

**VM:** So, California struck you as being a very different place from France.

**ET:** Oh, yes, very, very different. It was like, for me, the first days it was like a paradise, about the country. The lab. I didn't know the first day.

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**VM:** Did you speak English well at that time?

**ET:** Very bad.

**VM:** So what did you do? How did you communicate with people?

**ET:** When I came to the lab. it was funny because I knew some English. But the Bassham presented me to the others and one of those women was Zofia Kasprzyk.

**VM:** Yes.

**ET:** You knew her?

**VM:** Of course.

**ET:** It was funny because I told her, "So I can speak to you Polish!" And she told me, "I was sure you were a Frenchwoman who was coming!" So we communicated with her in Polish. It helped me for a few weeks at least to communicate with the others.

**VM:** Are you still in touch with her?

**ET:** Yes. She is in Warsaw. She is retired. We write at least once a year.

**VM:** OK. I will take her address before I leave. And so when you went there did you start ...you said you talked first with Calvin and he directed you to Rod Park?

**ET:** Exactly.

**VM:** And what did you decide with Rod Park?

**ET:** That I would do phosphorylation. First I knew the different, how to say, how to extract chloroplast; I didn't know everything, those things, because I didn't work (*on them*). So it was for a few days or a few weeks I just make the acquaintance with different people to know how to use the material. And then I started to work with radioactive phosphate given to chloroplasts and see what happens.

**VM:** And did anything happen?

**ET:** Yes, you know at that time I and other people saw that before ATP, something else is synthesised. And at last I found something but it was a kind of artefact because we stopped the reaction with alcohol, which is a very bad thing because of phosphatase which is in chloroplasts we got methyl phosphate, ethyl phosphate and things like that which appeared on the chromatogram. After that ,when I came back already in France, I saw what it was and somebody who took my work later saw it too and Ning wrote to me his experiments and I wrote to him my exactly the same conclusions.

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**VM:** It is very interesting you should say that because when Metzner was in Berkeley...do you know Helmut Metzner...?

**ET:** Yes.

**VM:** ...when he was there around 1957 or something, he had exactly this problem and he thought he had something very interesting. Bassham was away at the time and when he came back he spent a whole year working on this problem and found it was methyl phosphate. I am surprised nobody told you about this.

**ET:** No.

**VM:** Very odd. Rod Park was not there at the time so maybe he didn't know but I should have thought Ning would have known.

**ET:** Before I left I spoke about that with Calvin but he didn't tell me about that too; I think he didn't know.

**VM:** I think Calvin was a little embarrassed by the whole business and maybe that's why he didn't tell you. Calvin was very excited when it first happened. You know how excited Calvin was with everything. And then he became very much less excited when he discovered what he'd got.

**ET:** I remember Calvin telephoned to Ning, "Shall we publish it or not?" And I was leaving Berkeley three days later and I think they decided not to, of course.

**VM:** So did you spend all your time in Berkeley working on photophosphorylation?

**ET:** Yes. My work was that but I spent a little time also with Martha Kirk to see how she was working with gases giving CO<sub>2</sub>, phosphine and so on but it wasn't my work, my subject.

**VM:** Did you work in the big lab.?

**ET:** Yes.

**VM:** There were also small rooms but you had space in the big lab.?

**ET:** Yes, but this big lab. was separated, if you remember it was separation, and I worked for 6 months I think, I worked on Zofia Kasprzyk in front of me and beside was Martha Kirk. If you remember this division of the lab...

**VM:** I do slightly; It has been quite some time and I don't remember it very clearly.

**ET:** Do you remember the name of this Holland...it was a man from Holland who was working with oxygen at that time and he got some very interesting data?

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**VM:** I remember a woman who worked with oxygen but she might have been before you. Her name was Ingrid Fogelström-Fineman, I think.

**ET:** No.

**VM:** Goran Claesson.

**ET:** Maybe.

**VM:** I will see. I have a list of everybody who was there. I will see if I can find a name for you and let you know. A Swede, you say he was, from Sweden

**ET:** Yes.

**VM:** I'll see if I can find a name. When I was in Berkeley last summer I saw pictures of you in ski clothes. Are you a keen skier or were you a keen skier at the time?

**ET:** You mean skiing?

**VM:** Skiing, yes.

**ET:** One or two weeks we went with Martha Kirk and with others, Heber, Ulrich Heber, for skiing, yes.

**VM:** Did you learn there or did you do it already? Did you already know how to do it?

**ET:** Yes, yes, I did. And one time we went to see the Olympic skiing. Do you remember it was an Olympiad in...?

**VM:** In Squaw Valley?

**ET:** In Squaw Valley.

**VM:** I remember there was such an occasion; I didn't go.

**ET:** It was the winter of '60/'61 — or '59...one of those two winters I spent in California.

**VM:** How much did you see of Calvin in the lab.? You worked with Rod but did you see Calvin much?

**ET:** Very little, very little. He didn't come really very much. We saw him every Friday morning, because one of us has to talk about the work, but we didn't see him very much. I think he was busy also with his courses. He was a Professor of Organic Chemistry.

**VM:** Yes. But presumably you talked a lot to the other people in the lab. in addition to Rod.

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**ET:** Yes.

**VM:** Did you work closely with Rod Park? Did you see a lot of him?

**ET:** We spoke together but we didn't work, really, with that. One who was really very nice to everybody was Ning Pon. If somebody didn't know anything, Ning was always helping. You probably remember that, no?

**VM:** I remember that, yes. But then I have known Ning all the time; I see Ning quite often so I know him well. But I remember him from those early years. There was also a young man called Karl Lonberg, did you remember him?

**ET:** No. I worked a little with Heber, with Ulrich Heber, Roderic Park we were talking about phosphorylations (but not real work) and with Martha Kirk, Heber and Zangahar (*spelling?*) we worked together sometimes.

**VM:** So then you say you stayed in Berkeley for 17 months and then returned to a job that was offered to you in Saclay. Did you spend many years in Saclay?

**ET:** Twenty-eight years. The rest of my professional life.

**VM:** Did you every go back to Berkeley?

**ET:** Once in '68 and then I saw everybody. I saw the new lab., the new round building. It was funny.

**VM:** What did you think of that new round building?

**ET:** I thought it was very, very nice. Of course, I liked the Life Science Building, because it was...you know, spending so many months, it was nice. But I think that Calvin, if he could have this beautiful building and very comfortable for the lab., it was very good.

**VM:** Yes. You know, it was designed by the people who worked in the lab. Bassham was one of the chief designers — not the architecture but the general design, concept of the lab.

**ET:** I didn't know that. Did Calvin get it because he got the Nobel Prize?

**VM:** No, it was already in negotiation before then. I think the Nobel Prize came after the building was already agreed and I think perhaps even they had already started building, I can't remember, exactly, but it did not depend on his Nobel Prize.

**SM:** They had the funding but it was a question of, in any case, the old building was going to be destroyed and the group was growing and so they had to make other arrangements and this was happening already.

**ET:** The old building, the wood one?

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**VM:** Yes. So when they moved out of the wooden building it was not clear whether they would get another building or when they would get it. They spent five years in Life Sciences, where you were, and during that period he was able to get money from different sources in order to build a new building. And then it was designed, and I was part of that design group — not technical design but concept design — and that must have started in about the end of '60, beginning of '61. I think it was a successful building but it was never quite the same as the old building.

**ET:** Sure.

**VM:** What do you remember...what did Berkeley do for you in your later career? What did you learn from Berkeley that stayed with you?

**ET:** How to say: I think that, maybe I shouldn't say that, but France, after the war, was quite poor. The labs. were poor. Of course, in '59 it was already fourteen years after the war but it was better than the very days after the war. But coming to Berkeley, seeing the lab. which was really full of plenty of everything. If I tell you that my chromatogram I made in France at that time was in this, how to say, those...

**VM:** ...cylinders.

**ET:** ...cylinders. I took my paper round, I sew it...

**VM:** ...with cotton, yes?

**ET:** Yes, with cotton, and then I put that and I saw if the chromatogram is going or not. So it was really very poor. We don't have very much possibilities. And then seeing such a lab. was really fantastic for me. When I came back to France seventeen months later, Saclay was really at the same level as the States, as the Berkeley lab. But I must say two things: Calvin's lab. got money also from Atomic Energy — United States Atomic Energy. Saclay was also atomic energy. Both had the most money came from that. It was my first approach to the scientific part. And second thing I should say that I think two days after I went first in the lab., one of those girls, you would remember me the name I don't remember, say, "This evening there is a meeting of everybody at my home. You have to know people from the lab. and you are alone. Come, come and you will be like in a family." In France it wasn't like that at that time.

**VM:** It was more formal in France?

**ET:** Much more. I thought that people were really very, very good for those who were coming from outside.

**VM:** Friendly and open.

**ET:** Friendly and open.

**VM:** I think the lady who invited you might have been Ann Hughes.

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**ET:** You know that she adopted a child?

**VM:** Yes. Was that the lady?

**SM:** Ann Hughes.

**VM:** That was the one.

**SM:** Which she later returned.

**ET:** It was awful. Is she still alive?

**VM:** She is still alive and she is now, I don't know, in her 70s...

**SM:** Nearly 80, I think.

**VM:** ...and she has a house high in the hills which she built (not with her own hands but she arranged for it) and she lives there with her cat and her dog and we get Christmas messages from her.

**SM:** And we see her when we go to Berkeley.

**ET:** Sometimes she invited me, later I mean, but this was my first invitation in Berkeley and I was very astonished that just we didn't know each other.

**SM:** She is very hospitable.

**VM:** Always, always has been like that.

**ET:** Not only she. I remember Martha Kirk who invited us. People were very friendly and France at that time it was much more...people invite after many months.

**VM:** Now is it more relaxed in France?

**ET:** Much more because French people travel and see, you know.

**VM:** So when you came back to Saclay in 1961, more or less, was the atmosphere still formal in the lab.?

**ET:** No, I would say it wasn't, it wasn't like that. Much less than when I was in the other institute. Maybe it was a much younger institute.

**VM:** Saclay?

**ET:** Yes. Saclay was finished about in '54, late '54, so people were young and not so formal.



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**VM:** But even when you were in Berkeley in the late '50s Calvin, who was the oldest person there, was not yet fifty years old. He was born in 1911 so when you left he would have been fifty. Everybody in the Berkeley lab. was quite young. Calvin was the oldest and everybody else was younger than he was and from the beginning it was always very young. When he started the lab., in '45, he was only thirty-four years old, so it's quite young and the others were, of course, babies, almost.

**ET:** I think he was very young when he worked with Benson.

**VM:** Yes, indeed he was.

**ET:** And I think it was like we were, you know he felt like when he was young.

**VM:** Yes. Well, I would like to thank you very much for what you have remembered about it. It's very nice to see you again after all these years and I hope it won't be so long next time.

**ET:** I hope so too; I hope so too then we can meet in London.

**VM:** Indeed. Thank you.