

Евгений Тимофеевич Денисов



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Ушел из жизни Евгений Тимофеевич Денисов - доктор химических наук, профессор, академик Международной академии наук, заслуженный деятель науки РФ, председатель Секции кинетики РАН, председатель диссертационного совета, член IUPAC, почетный доктор Башкирского университета, главный научный сотрудник ИПХФ РАН.

Евгений Тимофеевич Денисов родился 19 июня 1930 году в Калуге. Отец Тимофей Арсентьевич был поначалу фельдшером, участвовал в Первой мировой войне, в советское время окончил техникум, стал техником-строителем, преподавал. Мать - Ольга Николаевна, дочка коллежского асессора, инспектора народных училищ в Юхнове - еще до революции окончила гимназию, после замужества работала учителем, вела домашнее хозяйство и воспитывала двух сыновей.

Калужское детство Жени, мальчика из хорошей семьи, было пресечено войной. Он был "под немцем", помнит и бегство властей, и наших пленных в городе, зверства и мародерство оккупантов, книги из школьной библиотеки, которые сжигали немцы. Ему было 11 лет и тогда он чуть не погиб, вытаскивая из костра многотомник Брэма, еще дореволюционного издания. Немецкий солдат, который присматривал за костром, поймал его и чуть не проткнул штыком. Спасли только книги, которые (тогда еще просто мальчик Женя Денисов) спрятал на груди и животе. Никто не гнал его вытаскивать эти книги и рисковать ради них жизнью. Это был его собственный выбор. Он с детства был очень смелым и дорожил знаниями.

В 1948 году, окончив с золотой медалью "историческую" калужскую школу № 5, он поступил в МГУ на химический факультет. Попал в МГУ случайно: пригласили, как медалиста, и ему там понравилось. Лекции на факультете читали знаменитые академики - В.И. Спицын (неорганическая химия), А.Н. Несмeyнов (органическая химия), А.П. Ребиндер (физическая и коллоидная химия). На 2-м курсе студент Евгений Денисов пришел на кафедру химической кинетики, основанную незадолго до этого Н.Н. Семеновым. Как и в сам МГУ попал сюда по воле случая, проходил мимо, увидел табличку и Здесь уже слушал лекции Н.М. Эмануэля, был свидетелем борьбы школы Н.Н. Семенова с Н.С. Акуловым, сидел на семинарах, которые вел сам Н.Н..

Свою дипломную работу "Окисление циклогексана кислородом воздуха в жидкой фазе под давлением" выполнял под руководством И.В. Березина.

Свою научную карьеру Евгений Тимофеевич начинал с окисления жидких веществ. До войны и сразу после отечественная и мировая химическая кинетика занималась окислением в газовой фазе. В это время Н.М. Эмануэль решил заняться окислением в жидкой фазе, того требовала и нефтехимическая промышленность. Первая публикация молодого Евгения по этому вопросу относится к 1954 году. Кандидатская диссертация "Кинетика каталитического окисления циклогексана с точки зрения цепной теории вырожденных разветвлений" была написана в 1956 году под руководством Н.М. Эмануэля и защищена в самом начале 1957-го.

После аспирантуры остро встали проблема трудоустройства, жилищный вопрос. Как раз в это время зав. кафедрой химической кинетики в МГУ Н.Н. Семенов стал организатором Научно-исследовательского полигона (НИП) ИХФ, который потом стал называться ФИХФ. По рекомендации Н.М. Эмануэля в 1956 году Е.Т. Денисова приняли на работу в этот самый НИП, еще не существующий наяву. Филиал только проектировался, работать пришлось на территории кафедры кинетики МГУ.

Первый жилой дом на улице Первой (ныне № 3) пустили в июне 1958 года, раньше первого исследовательского корпуса. И Евгений Тимофеевич оказался среди первых его жителей. Вместе с В.Г. Абрамовым, В.В. Барзыкиным, Л.Н. Гальпериным, К.К. Шведовым. Он не побоялся записаться одним из первых поселенцев в Черноголовку, даже когда там еще ничего не было кроме дремучего леса и болот, не отказался переехать туда и в 1958 г., когда в этих самых болотах сдали первый жилой двухэтажный дом.

С 1960 года появилась возможность заниматься экспериментом уже в Черноголовке. Пусть и в скромном еще масштабе. Е.Т. Денисов разворачивает работы по изучению механизма окисления

спиртов и кетонов. Вскоре им с первыми сотрудниками В.В. Харитоновым, В.М. Соляниковым, А.Л. Александровым была получена серия новых экспериментальных результатов.

В 1964 году в МГУ была успешно защищена докторская диссертация "Элементарные реакции жидкофазного окисления органических соединений". И стал он первым, живущим в Черноголовке, доктором химических наук.

В середине 60-х он со своими коллегами устанавливает крайне важный факт: многократный обрыв цепей в окисляющихся спиртах на особых ингибиторах - ароматических аминах и катионах металлов переменной валентности.

В 1965 году в Химфизике решено было расширить исследования по деструкции и стабилизации полимеров. Через два года на основе группы Е.Т. Денисова в отделе Н.М. Эмануэля основана Лаборатория окисления и стабилизации полимеров. Было в ней тогда 11 человек.

В последующие годы в этой лаборатории выяснили механизм действия ингибиторов и окислительной деструкции карбоцепных полимеров. Обнаружили явление многократного обрыва цепей на ингибиторах, участие алкильных радикалов полимера в обрыве цепей, влияние "клетки" полимера на скорость реакции, выдвинули концепцию о цепном окислении полимера как реакции с эстафетным механизмом перемещения свободной валентности.

Идей и задумок, тем исследований у Евгения Тимофеевича всегда было много, и он, не скучаясь, делился со своими сотрудниками и учениками. Не сердясь, объяснял непонятное, с удовольствием обсуждал новое. Его научную доброжелательность, щедрость и отзывчивость отмечают многие. Его лаборатория стала крупнейшим в СССР, да и одним из ведущих в мире, центром не только по изучению окисления, но и вообще по сложным процессам с участием свободных радикалов. С 1985 года она называется "Лаборатория кинетики радикальных жидкофазных реакций" (в отделе А.Е. Шилова, ныне - А.Ф. Шестакова) и ведет исследования малоизученных радикальных реакций и новых аспектов ингибирования окислительных процессов в органических соединениях.

У Е.Т. Денисова 5 сотен публикаций, средняя продуктивность - около 10 статей в год. Из своих многочисленных идей и результатов он сам, довольно скромно, выделял несколько. Это - тримолекулярная реакция зарождения цепей, механизмы распада гидроперекисей, циклический механизм обрыва цепей в окисляющихся системах, модель "жесткой клетки" для реакций в полимерах, параболическая модель радикальных реакций. Итогом работы лаборатории Денисова стала серия его монографий, учебников. Первая монография издана еще в 1962 году (в 1965-м

переиздана в Англии), последняя - в 2005 году. А всего их у Евгения Тимофеевича - 13. Прекрасно зная мировую кинетическую литературу и легко ориентируясь во многих классах химических превращений, он писал обзоры в авторитетные журналы и главы в научные сборники.

Под влиянием академика В.Н. Кондратьева профессор Денисов начал большую работу по сбору и систематизации кинетических констант элементарных радикальных реакций в растворах. Он подготовил и выпустил в 1971 году фундаментальный справочник "Константы скорости гомолитических жидкофазных реакций", активнейшим образом участвовал в составлении таблиц констант скорости элементарных реакций в газовой, жидкой и твердой фазах, которые готовила комиссия под руководством В.Н. Кондратьева. Всего у него выпущено 5 справочников, 5 "кирпичей Денисова", как шутят в лаборатории.

В 80-е годы, на основании собственного опыта и собранных данных, создавался Банк кинетических констант радикальных жидкофазных реакций. Эта огромная база данных в компьютере (более 30 тысяч реакций!) позволила Евгению Тимофеевичу произвести анализ многих классов реакций, понять их механизм и создать формулы, по которым можно рассчитывать (при некоторых предположениях) константы неизмеренных реакций. В этом огромное значение банка, созданного им вместе с сотрудниками лаборатории Т.Г. Денисовой, В.Е. Тумановым, Т.И. Дроздовой, Т.С. Покидовой, Л.Н. Пилипецкой при информационной поддержке коллег из лаборатории и других научных центров СССР.

Первый доклад на научной конференции он сделал в 56-м. В 65-м он выступал в Праге, в 67-м - в Сан-Франциско: редкие по тем временам зарубежные командировки. Далее - как говорится, везде. Более 200 выступлений на 160 конференциях! И не только ездил по конференциям, но и сам организовал немало конференций, школ и семинаров.

И на зарубежных конференциях, и когда работал в IUPAC (Международный союз чистой и прикладной химии), и здесь, в России, Е.Т. Денисов встречался, беседовал и сотрудничал со многими самыми знаменитыми химиками современности. На родине он много лет возглавлял Секцию кинетики Научного совета по химкинетике и строению АН СССР. Он был членом редколлегий таких журналов, как "Кинетика и катализ", "Журнал физической химии", "Химическая физика", "Нефтехимия", Intern. J. Chem. Kinetics.



В 1969 году при поддержке Н.Н. Семенова и Н.М. Эмануэля Евгений Тимофеевич организовал в Уфе, в Башкирском государственном университете кафедру химической кинетики. В течение многих лет он читал студентам кафедры лекции по этой специальности. На основе его лекций дважды издавался учебник "Кинетика гомогенных химических реакций", потом еще 3 раза выходили из печати его учебники, уже другие. Но что еще любопытно - книги эти интересны и полезны, но слушать самого профессора было еще увлекательнее: вы как будто сами участвовали в поиске решений! Читал он в Уфе, Черноголовке, Москве, Ленинграде, Ярославле, Львове, Софии, Дрездене и т.д.

Более тридцати лет он - председатель диссертационного совета при ИПХФ РАН. Долгое время был членом экспертного совета ВАК СССР, участвовал в приеме вступительных экзаменов в аспирантуру и сдаче кандидатского минимума по специальностям "физическая химия" и "катализ".

За годы своей научной и педагогической деятельности он кого-то учил, кому-то прививал любовь к кинетической науке, передавал свои приемы, методы, подходы. А ведь кого-то еще консультировал, помогал, направлял. И называться учеником такого Ученого, как Денисов, - это, несомненно, звучит гордо! География денисовских аспирантов такова: с Украины, из Белоруссии, Армении и Молдавии, из Азербайджана и России. И никто из них химию не бросил. Знаменательно!

Если посмотреть на достижения его бывших аспирантов и соискателей в смысле продвижения по службе, то среди них академик НАН Беларуси, заслуженный деятель науки и директор института В.Е. Агабеков, член-корреспондент НАН Украины Г.А. Ковтун, проректор и профессор Политехнического института в Горисе Р.Л. Варданян (Армения), заместители директора института ИОХ профессора Р.Л. Сафиуллин и В.В. Шерешовец (Уфа), зав. лабораторией профессор В.Д. Комиссаров (Уфа), декан химфака БГУ проф. А.Я. Герчиков, зав. кафедрами проф. В.С. Мартемьянов, проф. И.М. Борисов (Уфа), проф. Е.М. Плисс (Ярославль); профессор Б.Э. Крисюк (Черноголовка) и др. Еще немало докторов химических наук в академических учреждениях, доцентов в разных вузах, заведующих лабораториями на производствах. У большого ученого большие ученики!

Сотрудники - это ученики? И да, и нет, бывает по-всякому. Но они неотделимы от "шефа", это уж точно. Кто были самые первые сотрудники в лаборатории, даже еще группе, Денисова? Мы уже называли их, известных докторов: В.В. Харитонова, В.М. Соляникова, А.Л. Александрова, В.С. Мартемьянова. К ним надо добавить Д.И. Метелицу и покойную теперь Л.Н. Денисову, знаменитую в Черноголовке поэтессу Терезу Дюпон. Сейчас никого из них в лаборатории уже нет. А 40 с лишним лет назад это был костяк коллектива и опора завлаба в науке. Лаборатория тем временем пополнялась. Пришли Н.В. Золотова, Ю.Б. Шилов, А.П. Грива, Т.И. Дроздова, и работа продолжалась.

Почти 6 десятков кандидатских и докторских диссертаций защищено под руководством Евгения Тимофеевича и с его участием, более 20 книг им выпущено, сделано свыше 200 обстоятельных докладов на конференциях...

Евгений Тимофеевич жил наукой. Она была в его жизни каждую минуту, он работал каждый день, даже если болел, даже если был в отпуске, даже по выходным, просто работал, до самого последнего дня, и, действительно, был этому счастлив.

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Татьяны Форапоновой, внучки ученого; [статьи](#) *Профессор Денисов и его школа* М. Дроздова, биографической [статьи](#) на сайте ИПХФ РАН.

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