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From the chemistry set to DYI biology: to the history of the evolution of a home laboratory

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The affirmation of the values of citizen science is one of the main subjects in the modern narrative about the relationship between science and society. If scientific knowledge is a public good, then access to it should be provided equally to both professionals and amateurs. However, in practice, the call for the democratization of science faces a number of limitations, they are associated both with the objective risks of using unsafe technologies by non-professionals, and with the institutional closeness and economic inaccessibility of these technologies for ordinary citizens. DIY biology is a branch of civil science that tries to circumvent these limitations: firstly, through the establishment of horizontal community normativity, which forms a special ethos designed, among other things, to ensure the safety of amateur research; secondly, by creating home laboratories that make biohackers independent of equipment available exclusively to an institutionalized academy. It is offered a historical and conceptual reconstruction of the development of home laboratories, showing how the social and political context in which science penetrated the kitchens and garages of common people.

Keywords: philosophy of science, laboratory studies, democratization of science, citizen science, kitchen science, biohacking, chemistry set, portable laboratories

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