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Pierre SEBBAN
Professor at the University of Paris XI

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Object: Recommendation letter for Dr. László KALMAN
Applying to an Assistant Professor Position

To whom it may concern,

I have been knowing László Kalman since 1994 when he was a student of Prof. Peter Maroti (University of Szeged, Hungary) with whom I was collaborating. László Kalman was visiting my lab, doing experiments in the frame of our collaborative research grant.

The topic of our collaboration has been the study of the protonation phenomena coupled with the electron transfer processes in bacterial reaction center proteins. These measurements (kinetics and stoechiometries of proton uptake) are very difficult to achieve in a proper and reproducible way. Indeed, internal and external calibrations of proton magnitude have to be measured using dyes and pH electrodes, taking into account the corrections due to the variable amount of cofactors in the proteins. Moreover, the instability of the samples kept with very low buffer capacity and the weakness of the signals make them especially rare to be measured in the different labs.

During that period (1994-97) László Kalman have shown excellent capabilities of experimentalist. In addition, early in his carrier, he was able to interact very constructively to interpret the data we got under the light of models that he was himself developing.

I keep a very high opinion of him.

After his thesis, he decided to go abroad as a post doc in Prof. Jim Allen's laboratory, in Arizona. He shifted his research interest to study bacterial reaction center mutants modified to mimic the PS2 reaction centers. His work which was published in *Nature*, have shown that the bacterial reaction center can potentially, when such mutated, oxidizes a tyrosine in a position equivalent to that found in PS2 reaction center between the primary electron donor and the manganese cluster involved in oxygen evolution.

This very elegant and clever work has demonstrated how much the bacterial and the PS2 reaction centers relate in *Evolution*.

I consider László KALMAN as an excellent scientist, with very good experimentalist qualities and great abilities to expose clearly the output of his research.

He fully deserves to obtain a position in the US and I have no doubt that any University hiring him will not regret it.

I therefore very strongly support the success of the application of Dr. László KALMAN to an Assistant Professor Position.

Pierre SEBBAN
Professor of Biophysics